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THE FARM REAL ESTATE SITUATION, 1930-31

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THE SITUATION IN GENERAL

Outstanding features of the farm real estate situation for the year 1930-31¹ have been a general and definite writing down of farm land values, a substantial increase in the number of distress sales, a decrease in the number of voluntary transactions, a well-defined tendency for farms in "strong hands" to be withheld from the market at present prices, and an apparent increase in the demand for farms to rent. Most of the unfavorable developments during the past year may be definitely associated with the drastically reduced agricultural incomes, due in part to the drought, but primarily to the decreasing level of prices and the declining ratio of prices received to prices paid by farmers.

¹The real-estate "year" ordinarily covers roughly a 12-month period ending about Mar. 1. Possession of farms by lease or sale is commonly given at that time, and occupancy usually is considered to begin on that date. Unless otherwise stated, therefore, the term "1930-31" denotes the 12-month period ended on or about Mar. 1, 1931. Most of the real estate data here used pertain to that period. Other data are available for the calendar year only. The term "1930" denotes the calendar year ended Dec. 31.

Following weaknesses indicated in the latter part of 1930, prices of virtually all major farm products declined substantially (Tables 2 and 3), and by March, 1931, or earlier, had reached the lowest points in recent years and they continued to drop. Prices of commodities farmers buy declined more gradually (Table 4), with the result that the ratio of prices received to prices paid by farmers was in March only slightly greater than two-thirds its 1910-1914 level, and continued to decline during succeeding months (Table 2.) Such an exceptionally low ratio, combined with a low price level (figs. 2 and 3), has augmented tremendously the difficulty of farmers generally in meeting their fixed charges of taxes and payments on long-term indebtedness, neither of which items reflect a declining price level. The increase in physical produce required to liquidate these fixed charges has been altogether disproportionate to the general decline in prices. Resulting delinquencies and consequent foreclosures (Table 9 and fig. 6) have increased the amounts of land in the hands of involuntary holders, a circumstance which of itself undoubtedly exerts a bearish effect on the land-value structure, with further impairment of owners' equities.

Gross income from farm production in 1930 (Tables 5 and 6) declined 22 per cent from that of 1929 to a level not far above that of 1921; operating costs declined less than 9 per cent; wages paid to hired labor declined about 18 per cent; taxes declined very slightly; and the net income from which must be paid all interest on invested capital, both farmer-owned and borrowed, as well as farmers' living expenses, declined approximately 31 per cent. If adjustment is made for rent and interest paid by farm operators, and for shares of operating expenses paid by landlords, income from farm production failed by \$346,000,000 to return to operators an amount sufficient to recompense them and their families at the rates paid hired labor, and paid no return whatever for the operators' own invested capital. "Farm returns" reported by correspondents, declined on an average from \$1,298 for 1929 to \$538 for 1930. (Table 7 and fig. 5.) As a result of the reduced income to the agricultural population, not only has the internal financial structure of agriculture assumed a more serious aspect, but also the normal purchases of industrial goods by farmers have had to be curtailed, a circumstance which can not be held insignificant with respect to the general business depression.

But developments during the year have not been without their more favorable aspects. Values in many areas are lower than at any time in the last score of years (Table 1 and fig. 1)² and are consequently closer than at any time since the World War to levels which will facilitate relief to the present congested real-estate market when favorable commodity-price relations are in prospect. Correspondents frequently mention that inquiries for farms are numerous, and that prospective buyers are waiting a turn in the market. It is no secret that qualified observers have focused their attention squarely on the prospective developments in the prices of farm products. Frequent indications that farms in "strong hands" are not for sale are evidence of confidence in the future of agriculture. The industrial depression has served to focus attention on the relatively strong position, in times

² Preliminary State estimates of changes in values are published annually in the May issue of Crops and Markets.

of adversity, of the farmer who has a substantial equity in his farm and can, if necessary, become almost entirely self-sufficient. The industrial depression, further, has contributed to the first net increase in farm population in years, and appears to have resulted in an increased rental demand. A slight decrease in taxes is likewise encouraging. (Tables 4 and 13.)

If it is true, however, that farm real estate³ values reflect in a unique manner the general condition and attitude of agriculture, then in spite of the somewhat encouraging interpretation that may be placed upon some developments, both the severity and the generality of the price declines of the past year may be accepted as evidence of the painful readjustments that are being forced by the kaleidoscopic economic events of recent months.

For the United States as a whole, the index of estimated value per acre of farm real estate, based on reports by the crop correspondents⁴ of the Bureau of Agricultural Economics, declined 9 points during 1930-31 (Table 1) to 106 per cent of the 1912-1914 average. (One point on the index equals 1 per cent of the average value per acre for the three pre-war years 1912, 1913, and 1914.) The 1930-31 drop of 9 points is in contrast to declines of 1 point in each of the years 1929-30 and 1928-29; 2 points during 1927-28; 5 points during 1926-27; 3 to 5 points during each of the four years 1922-23 to 1925-26, inclusive; 18 points in 1921-22; and 13 points in 1920-21 following the peak of 70 per cent above pre-war reached in 1920.

Calculated as a percentage of the values in the preceding year, rather than as a percentage of the pre-war base, the decline in values averaged approximately 8 per cent, in comparison with approximately 8 per cent in 1920-21, and nearly 11 per cent in 1921-22, the year of greatest decline, and with approximately 1 per cent in 1928-29 and 1929-30.

The continued downward trend during 1930 and early 1931 brought the United States average value per acre to a point only 6 per cent above the pre-war base, and added 5 States to the 10 whose averages were already below their 1912-1914 levels. The national average as of March 1, 1931, was 2 points below that of 1916, and 3 points above that of 1914, at which time the index stood at 103.

Land turnover, or changes in farm ownership, for the country as a whole showed an increase during 1930-31 in the volume of all forced sales and related losses of title through financial default. (Table 9.) The weighted average rate for all classes of such transactions for the country as a whole was 26.1 farms per 1,000 (that is, out of each 1,000 farms an average of 26.1 farms went through foreclosure, tax sale, sale for bankruptcy, or other such loss of title). This represented an increase from the 20.8 reported for 1929-30 (only slightly above the low point of 19.5 established in 1928-29) to the highest point in the bureau's record, which began with the

³The term "real estate" as used throughout this circular includes the land and buildings and other permanent improvements.

⁴In view of the small number of bona fide sales occurring in many sections of the country during recent years, a possible bias toward holding prices may exist in the estimates of value obtained in this survey. Correspondents continue frequently to mention that voluntary sales are yet too few to establish much of a price base. Even though the estimates may thus require confirmation by subsequent actual voluntary sales, their trend should be significant. Estimates would seem to be prerequisite to the bids and offers out of which sale prices are made.

12-month period ended March 15, 1926. The corresponding national average for 1927-28 was 22.8 farms per 1,000; for 1926-27, 23.3; and for 1925-26, 21.6. Excluding the tax-sale classification, the types of involuntary transfer (principally "deeding back" and mortgage foreclosures) increased in 1930-31 to 18.7 farms per 1,000 from 15.7 indicated for the preceding year. Plantations and ranches are considered as farms in these computations.

Examination of the geographical distribution of the value declines during the last year discloses that, measured in terms of pre-war values, the largest losses for individual States were recorded in Arkansas, where drought damage was exceedingly severe, and in North Carolina. In earlier years values had held up fairly well in this State, but since 1926 they have been declining rather consistently. Other large declines were reported in important sections of the Corn Belt, the corn and winter wheat belt, the Cotton Belt, and the hay and dairy region.

Measured in terms of last year's levels, the greatest average divisional decline, 11 per cent, was reported by the West North Central and the West South Central divisions. Declines for individual States in the respective divisions ranged from 6.2 per cent in Nebraska to 14.1 per cent in Missouri, and from 8.3 per cent in Louisiana to 16.3 per cent in Arkansas. Changes in frequency of transfer of ownership by various methods were, on the whole, compatible with value changes, although there were significant differences between areas. The increases in rates of forced sales in the West North Central States were, on the whole, somewhat less than the average for the United States, the total forced sale rate having increased from 27.5 farms per 1,000 for the year ended March 15, 1930, to 31.3 farms per 1,000 for the year ended March 15, 1931. The general level of forced sales, however, in most of these States has been considerably above the United States average during the whole period for which data are available, with tax sales constituting the minor portion of forced transfers.

Involuntary transactions as a result of foreclosure of mortgages, bankruptcy, sale to avoid foreclosure, and related transfers have stood at relatively high levels for several years. Voluntary sales have become an even smaller factor in the real estate market than in recent years. Such a situation might be expected for at least two reasons: (1) Buyers have a wider choice of farms offered at a sacrifice than during earlier years, and (2) owners who do not have to sell are inclined not to offer their property at present prices. During the six years of the available record, voluntary sales, on the average in the West North Central States, have been outnumbered by forced sales, and it is estimated that during the year 1930-31 about three distress sales occurred to every two voluntary.

The large average declines in values reported for the West South Central States have been accompanied by an increase in the average number of distress sales from 16.8 to 22.4 farms per 1,000, and a decrease in voluntary sales from 24.2 to 16.7 farms per 1,000. On the whole, however, the forced-sale rate in this region during recent years has been slightly lower than for the country as a whole, and well below that of the West North Central States; and the rate of forced sales during the last year has been lower than that of the latter section. It is interesting to note that although values declined

sharply in 1921 and 1922, they recovered perceptibly following the favorable cotton prices of 1922-1925. During this time values in most sections were continuing downward. The declines of last year, however, brought the divisional average values below the 1923 levels, and total forced sales for the division last year reached the highest point in the available record. Voluntary sales, however, have been declining steadily, and last year for the first time in the available record, became less frequent than sales entered into unwillingly by the owners.

Values in the East North Central and South Atlantic States declined 9.4 per cent on an average, and those in the East South Central declined 8.6 per cent. Declines in individual States ranged from 5 per cent in Michigan to 12.1 per cent in Illinois, from 2.4 per cent in Maryland to 14.6 per cent in North Carolina, and from 7.3 per cent in Tennessee to 9.4 in Kentucky for the respective geographic divisions. Voluntary-sales activity has been falling off fairly consistently over these areas, and during the last year, the rate reached the lowest levels in the available record, not only for the division as a whole, but for a majority of the individual States in these divisions. Forced sales, which on the whole have been less frequent in these States than in either the Mountain or the West North Central States, have become more frequent than voluntary sales. The South Atlantic group averaged about two forced sales to one voluntary sale last year, with two States reporting more than three forced sales to every voluntary sale. The rate of distress sales increased sharply in the East South Central States, reaching 25.9 farms per 1,000, as compared with 32.2 in the South Atlantic States and 24 in the East North Central States.

Renewed slight declines have replaced the stable-to-upward tendencies noted a year ago in the Mountain and Pacific States, and voluntary sales have shown a considerable drop. Forced sales on the other hand increased sharply, abruptly terminating the tendency apparent in recent years, especially in the Mountain States, toward a more normal relationship between voluntary and distress transactions.

Value declines in New England were, on the whole, slight, and the transition from agricultural to other uses discussed later as well as in previous reports, appears to be continuing. Practically no changes in the frequency of voluntary sales for the area as a whole appeared, and a slight recession in distress transactions was indicated. Middle Atlantic States values declined somewhat, with an accompanying decrease in the frequency of voluntary sales, and with a slight increase in distress sales.

The bureau index of total taxes on farm property declined from 267 per cent of the 1914 level to 266. Influences on values, other than earnings, which have been discussed in earlier reports continued to operate during 1928-29. One of these influences, foreclosed and other "distress" land, is still having a depressing effect in important areas, more particularly in the Middle West and the South, according to reports. The supply of farms hanging over the market generally was indicated by correspondents to continue large, although indications of an increased rental demand may develop into an alleviating influence. Readjustment of the entire land-value structure of some

areas, for example, the Middle West, toward a more ample ratio of value to earnings apparently did not reach an end. (Table 8.)

Tendencies toward greater conservatism in the extension of mortgage credit continued and, according to reports, were accentuated by apparently tighter policies in general. Dealers' reports expressed more than usual concern about the effect of the generally tighter mortgage-credit situation upon farm buying. Comments made in sections of the Middle West suggested that the wave of bank failures had resulted in farm purchases made in the belief that farm land was a safer depository for funds than banks pending readjustment in the banking situation.

The latest available statistics for farm-bankruptcy cases concluded in the courts showed a further decline. (Table 10.) No data later than for the fiscal year ended June 30, 1930, are available, but for the 12-month period ended on that date the bankruptcy rate per 1,000 farmers declined to 0.71 from 0.78 for the preceding period. These figures compare with rates of 1.22 and 1.23 per 1,000, respectively, for 1925-26 and 1924-25. The rate of 0.71 is still slightly more than five times the 1910-1914 average rate. All States did not share in the decline, however, and in New York, Pennsylvania, Ohio, Indiana, Utah, and Nevada, the number of bankruptcies involving farmers was the highest on record. It should be recognized that the time of discharge of bankruptcy cases from the courts lags considerably behind the conditions giving rise to such action; consequently the data on farmer bankruptcies can not be accepted as a strictly current indication of farm economic conditions.

The business recession, according to dealers, is bringing greater inquiry not only from city workers throughout the industrial States, largely for small, easily accessible properties for "part-time farming" purposes, but also in the country at large from men who originally came from the farms and who, with the slackening of employment, are reported to be turning their eyes farmward again.

Notwithstanding the general dullness of the market, a limited number of bona fide sales on a substantial basis are being made. Active local farmers, buying largely for personal or family operation, constitute the greater proportion of buyers. (Table 12.) A considerable proportion of these sales, according to reports, constitutes enlargement of holdings by established farmers who are taking advantage of the opportunity to pick up near-by lands at favorable figures. Tenants appear to be availing themselves of opportunities to buy farms at prevailing prices. Speculative and investment buying by nonoperators appears to be small and to consist in part of purchases at "bargain-counter" prices.

The highly variable character of the situation from community to community and between various parts of individual States should be recognized, as should divergent trends for various grades of land. The figures given in this circular are averages of all grades. Values of the best grades have held up better than those of the poorer. The poorer grades are reported to be difficult to dispose of at any price. Communities in which foreclosures have been a rarity and in which values have been firm are found interspersed among other communities in which values are reported to be still going down and foreclosures to be more numerous than ever before. This survey can give only a composite picture of the predominating trends. The spotted

character of the situation makes generalization difficult and of limited significance. Only a comprehensive survey will reveal the governing tendencies and the underlying forces at work.

FARM REAL ESTATE VALUES

DECLINES WIDESPREAD AND SEVERE

The numerous developments unfavorable to agriculture during the year 1930 have been reflected in a widespread and definite writing down of farm real estate values. Not since the year 1922, which marked the close of the larger postwar declines, have values dropped to such an extent as in the year ended March 1, 1931. The bureau's index of estimated value per acre of farm real estate for the United States as a whole dropped 9 points—from 115 to 106 per cent of the 1912-1914 average—during the year. This decline, which is in decided contrast to the irregularly diminishing declines of 4, 5, 3, 3, 5, 2, 1, and 1 points for the several years ended March 1, from 1923 to 1930, respectively, no doubt reflects the effect of drastically reduced incomes in crystallizing certain of those parts of the land-value structure which had been weakened by the persistent stresses and strains of the last decade.

Not only were the declines of the past year more severe than those of a year ago, but they were far more general, reaching in some degree at least to nearly every corner of the country. For the year ended March 1, 1931, the bureau index indicated declines in 46 of the 48 States, with no change in the remaining 2, whereas for the previous year 24 States experienced declines, 18 remained unchanged, and 6 reported small increases. Table 1 and Figure 1 indicate the direction and extent of these changes, together with trends since 1912, by States and geographic divisions.

TABLE 1.—Farm real estate: Index numbers of estimated value per acre, by geographic divisions and States, 1912-1931¹
 [1912-1914=100 per cent]

Geographic division and State	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	Net change 1931 over 1930 ²	Net change 1931 over 1930 ²
United States.....	97	100	103	103	108	117	129	140	170	157	139	135	130	127	124	119	117	116	115	106	-9	-9
Geographic divisions:																						
New England:																						
Maine.....	109	102	98	96	98	110	115	124	142	132	127	129	127	124	126	124	124	122	124	123	-1	-1
New Hampshire.....	97	101	102	101	98	103	111	116	129	123	126	111	109	111	113	112	112	111	111	110	-1	-1
Vermont.....	101	101	98	104	115	127	133	136	150	150	145	130	125	126	126	125	123	123	123	121	-2	-2
Massachusetts.....	98	100	102	98	100	110	114	119	140	134	134	132	131	132	134	131	131	131	131	130	-1	-1
Rhode Island.....	100	101	100	102	105	112	118	123	130	127	124	126	128	128	130	133	134	133	133	133	-1	-1
Connecticut.....	93	100	102	100	102	110	116	121	137	134	140	137	140	137	137	138	139	139	140	140	0	0
Middle Atlantic:																						
New York.....	98	100	102	100	102	103	109	115	118	123	116	115	112	111	109	108	105	105	103	96	-7	-7
New Jersey.....	98	100	102	100	102	111	115	119	130	121	121	115	120	124	129	128	127	127	125	123	-2	-2
Pennsylvania.....	98	100	102	100	105	114	119	124	140	131	120	118	116	114	114	112	111	110	107	101	-6	-6
East North Central:																						
Ohio.....	98	100	102	107	113	119	131	135	159	134	124	122	118	110	105	99	96	94	90	82	-8	-8
Indiana.....	97	100	103	102	110	116	128	135	161	148	120	116	108	102	95	87	84	83	80	72	-8	-8
Illinois.....	97	100	103	102	105	111	119	130	160	153	126	123	116	115	109	99	96	95	91	80	-11	-11
Michigan.....	98	99	103	105	111	120	134	137	154	152	148	145	138	133	129	127	125	124	115	105	-6	-6
Wisconsin.....	97	100	103	104	117	124	133	143	171	168	154	147	139	130	125	122	120	119	117	114	-3	-3
West North Central:																						
Minnesota.....	95	100	105	107	122	138	155	167	213	212	187	177	170	159	155	145	140	138	133	116	-17	-17
Iowa.....	96	99	104	112	128	134	145	160	213	197	162	156	147	136	130	121	117	116	113	98	-15	-15
Missouri.....	97	100	103	102	108	115	125	137	167	156	133	127	117	112	104	99	96	95	92	79	-13	-13
North Dakota.....	97	100	103	103	112	118	124	130	145	141	136	128	114	109	105	100	99	98	95	85	-10	-10
South Dakota.....	96	101	103	101	108	116	126	145	181	173	146	136	117	115	107	97	96	95	93	83	-10	-10
Nebraska.....	98	100	102	101	104	110	122	145	179	166	144	138	128	123	113	119	117	116	113	106	-7	-7
Kansas.....	101	99	99	103	104	110	122	132	151	149	130	127	118	115	115	113	113	113	113	103	-10	-10

South Atlantic:	100	101	99	100	105	115	124	129	119	107	112	114	111	111	111	107	107	-4
Delaware.....	97	100	103	100	109	115	129	139	119	133	133	130	123	123	124	126	126	-3
Maryland.....	97	100	103	100	117	125	142	167	180	162	154	148	138	137	136	134	117	-17
Virginia.....	97	100	103	101	104	122	135	154	141	125	127	116	110	109	108	105	98	-7
West Virginia.....	97	99	104	102	114	130	152	176	196	168	195	192	187	185	172	165	158	-23
North Carolina.....	101	98	101	94	98	107	122	162	230	186	128	136	138	128	113	110	110	-14
South Carolina.....	98	101	101	94	105	116	131	172	217	172	186	112	104	102	101	100	90	-10
Georgia.....	96	99	105	97	103	109	126	143	178	157	155	223	153	133	176	174	172	-6
Florida.....	97	100	103	100	111	127	146	170	151	147	141	140	139	134	130	129	127	-12
East South Central:	96	100	104	100	110	121	145	163	200	169	154	138	148	147	134	127	125	-9
Kentucky.....	98	98	103	98	98	103	128	143	177	147	135	154	145	143	143	133	129	-14
Tennessee.....	97	102	102	97	111	121	131	155	218	150	148	134	126	123	122	122	112	-10
Alabama.....	98	101	101	95	109	129	149	169	222	186	174	160	150	147	145	141	118	-23
Mississippi.....	99	102	99	95	106	112	143	157	198	163	140	144	137	141	133	132	132	-11
West South Central:†	93	100	105	103	103	115	133	141	174	156	153	128	137	146	146	141	139	-16
Arkansas.....	97	100	103	100	94	100	106	114	126	105	87	75	70	71	72	72	70	-2
Louisiana.....	100	101	99	96	99	114	130	146	172	162	136	133	129	117	116	116	114	-2
Oklahoma.....	97	103	100	93	94	97	121	147	176	146	134	121	112	100	95	94	95	-3
Texas.....	98	103	98	93	102	107	118	141	152	123	113	98	82	82	82	82	83	-2
Mountain:	100	104	96	100	96	111	138	127	144	125	119	108	108	106	108	109	110	-1
Montana.....	100	102	98	97	95	105	140	165	148	133	134	128	122	123	122	123	123	0
Idaho.....	96	100	102	98	104	117	122	144	167	137	133	131	130	129	128	127	126	-4
Wyoming.....	96	100	103	102	99	96	103	117	135	125	119	102	99	99	99	99	97	-2
Colorado.....	98	100	103	100	102	112	118	140	132	134	117	112	111	110	110	110	108	-2
New Mexico.....	96	100	103	100	102	112	118	140	132	134	117	112	111	110	110	110	108	-2
Arizona.....	96	100	103	100	102	112	118	140	132	134	117	112	111	110	110	110	108	-2
Utah.....	96	100	103	100	102	112	118	140	132	134	117	112	111	110	110	110	108	-2
Nevada.....	96	100	103	100	102	112	118	140	132	134	117	112	111	110	110	110	108	-2
Pacific:	97	100	103	99	100	104	112	118	130	130	122	113	110	106	106	106	106	-1
Washington.....	97	100	103	99	100	104	112	118	130	130	122	113	110	106	106	106	106	-1
Oregon.....	98	100	103	99	100	104	112	118	130	130	122	113	110	106	106	106	106	-1
California.....	93	99	108	111	116	130	136	142	167	168	166	163	164	161	162	161	158	-2

† All farm land with improvements as of Mar. 1. Owing to rounding of figures, 1912-1914 will not always equal exactly 100 per cent.

‡ Minus (-) denotes decrease, plus (+) denotes increase.

§ Revised figures.

Changing economic and physical relationships pertaining to agricultural prosperity have not been uniform over the country, and, as might be expected, considerable variation exists in the magnitude of the fluctuations in realty values. Values in the New England, Mountain, and Pacific States, on the whole declined the least; those in the West North Central, South Atlantic, and the South Central groups dropped more sharply. The largest declines for individual States were reported as occurring in the South Atlantic and West South Central groups.

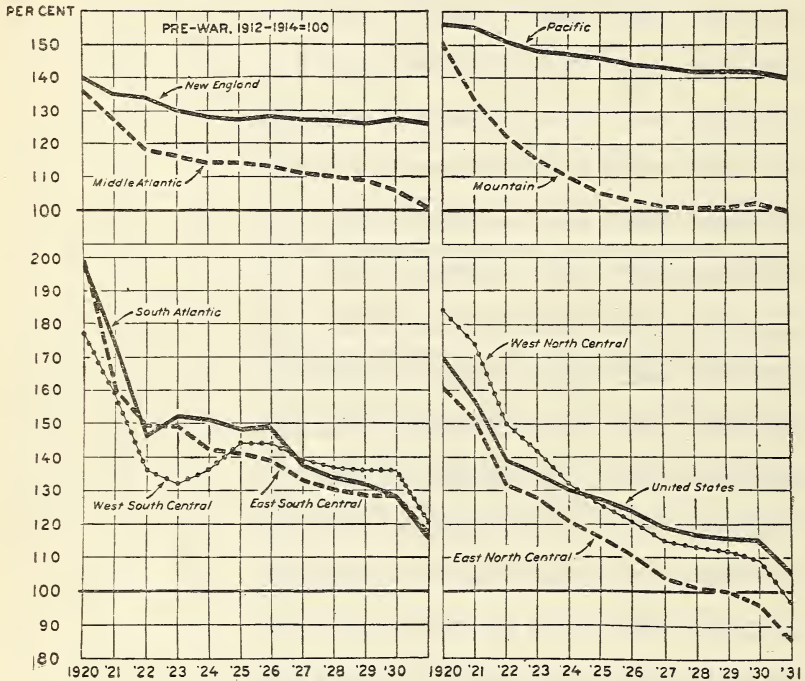


FIGURE 1.—FARM REAL ESTATE: INDEX NUMBERS OF AVERAGE VALUE PER ACRE, AS OF MARCH 1, BY GEOGRAPHIC DIVISIONS, 1920-1931

Declines in farm real estate values have been greater during 1930-31 than in any year since 1921-22. Average values in all but two States were lower than a year ago. The areas most seriously affected were in the North Central and Southern States, although there was considerable variation, even within geographical divisions. The stable-to-upward tendencies which in recent years have appeared in the far West were interrupted.

When the State figures are weighted by acreage of land in farms and averaged for the customary geographic divisions, certain important comparisons are evident. Average values for the New England and Middle Atlantic groups stood at 126 and 101 per cent of the 1912-1914 average for the year ended March 1, 1931. Corresponding figures for the previous year were 127 and 106, respectively. More drastic declines were reported by most of the South Atlantic, East South Central, and West South Central States, the indexes for the respective groups having stood at 116, 117, and 121 per cent of the 1912-1914 base, as compared with 128, 128, and 136, respectively, for the preceding year. Land values in many of these States

have been sustained on fairly high levels, as compared with those in the country as a whole. This situation was due in part to the favorable cotton prices received during the period of 1922-1925, which served to check in appreciable measure the downward course of values at a time when values in most other agricultural sections were declining rapidly. Declines in these sections should be considered in the light of the fact that last year's values in several of these States were considerably higher than before the war. Parts of the South Central States were severely affected by the drought in the summer of 1930. Hardships resulting therefrom have no doubt had a very disturbing effect on the farm-lands market, in contrast to the apparently approaching stability, encouraging signs of which had appeared during the preceding two or three years.

It will be recalled that values in the North Central States also had shown some signs of increasing firmness in the years ended March 1, 1928 and 1929. Weaknesses, however, which reappeared in the latter part of 1929, continued into 1930 and early 1931, and carried the index to new low levels. For the year ended March 1, 1931, values in the West North Central States averaged only 97 per cent of pre-war values, and those in the East North Central States averaged only 87 per cent. In 7 of these 12 States farm land values are below the 1912-1914 average, according to the bureau estimates.

Extraordinarily severe declines in the prices of practically all major agricultural commodities, together with losses and hardships occasioned by the drought, might be expected to have a definite depressing influence on land values under almost any conditions. With the combination coming as it did at a time when the farm-land market was already congested, when the ratio of forced sales to voluntary sales was far higher than normal, and when credit stringency was widely felt to impede the free transfer of land, it is little wonder that farm-land values have been depressed to the lowest levels in considerably more than a decade.

PROSPECTIVE EARNINGS AS WELL AS REALIZED EARNINGS IMPORTANT
IN VALUE STRUCTURE

The developments of the past year have served to emphasize again the question, "Whither values?" The question is a difficult one. It is, moreover, a question for which no single answer can well be given. Factors affecting land values are admittedly both complex and numerous, and the various factors are not necessarily uniform in action over the different parts of the country. Certain broad generalizations concerning conditions over wide areas can be made, but such statements must perforce overlook the many localized conditions that intensify or diminish the effects of the broader movements. The information available concerning the operation of the various factors is still far from complete, and in many cases is qualitative rather than quantitative.

Of the numerous factors that determine values, the share of earnings attributable to real estate as such—as distinguished from the shares of the farmer's labor, management, and working capital—will be conceded to be the most fundamental. Strictly and logically speaking, however, values depend not on incomes already received, but on future or prospective incomes, and realized earnings are of

interest only in so far as they serve as criteria by which to evaluate the future, and in so far as they affect the purchasing power of prospective farm buyers. When farms change hands, buyers assume, and sellers relinquish, the right to such income as may in the future accrue to the owner of the respective properties.

In arriving at the prices at which exchanges are made, the various parties to the transactions presumably consider the worth to themselves of the prospective incomes as compared with the prices involved. If each party is free to accept or reject the offer of another or to await a more opportune time; if each is in possession of the essential facts concerning the physical qualities of the property; if each has about the same knowledge of general economic conditions; and if there are two or more competing buyers and sellers;—in short, if the idealized conditions of a “perfect market” exist—then the prices at which the properties change hands tend to represent or reflect the composite market opinion of the present worth of the prospective incomes accruing to the farm owners. Income as here used signifies not only money income, but also the pleasure and pride of owning a farm home, the cementing of personal and community interests, and the other more or less intangible satisfactions which may be attributed to the ownership of farm real estate.

In actual practice the market qualifications just enumerated are frequently not realized. Not all buyers and sellers are equally well informed as to general economic conditions, nor are all buyers equally able to accept or reject offers or to await a more propitious time. Especially in a time like the present are certain owners under pressure to sell. Foreclosure proceedings may have forced the sale of some farms, failure to meet taxes may have forced others; still other owners may prefer a sale which leaves a small equity, to accepting further risk of losing their property as a result of unfavorable crops or prices. Such occurrences interfere with the free play of supply and demand under the circumstances approximating those of a “perfect market,” and may and do result in the transfer of farms at prices which do not represent a composite of qualified opinion as to the present worth of future incomes.

Another disturbing factor is that after a prolonged period in which farmers have experienced difficulty in meeting their obligations and maintaining competitive living standards, the savings of the largest group of prospective farm purchasers, farmers themselves (especially the younger generation), are likely to be depleted. Effective demand, bolstered by purchasing power, is likely to be weak at a time when the supply of farms is unusually great. This again is a situation which may upset the more “normal” market relationships. Such occurrences are in a measure independent of the correctness with which the composite market judgment, that under ordinary circumstances leads to prevailing market price, appraises the prospective incomes from farm lands, and their present worth.

The process of evaluating the present worth of the prospective income from land is implicit, although frequently not explicit, in any farm appraisal. Many of the pertinent factors are more or less intangible, and are therefore particularly susceptible to erroneous estimation. Public opinion, on the other hand, is subject both to periods of intense optimism and to periods of correspondingly intense pessimism. It is not surprising, therefore, that even the composite judg-

ment of experienced observers may at times fail signally in appraising correctly the present worth of prospective returns for even a reasonably short period with the result that the market prices of a given period, when viewed in retrospect, may appear to have been inordinately high or inexcusably low. The outstanding example in recent memory is the decade of declining land values following the boom which culminated in the peak values of 1920.

The statement is frequently made that it is only by the past that we can forecast the future. Previous studies of land values (5)⁵ indicate that the experience of the years immediately preceding the date of valuation tends to be given most weight in judging the value of farm real estate at a given time. Thus in the decade before the World War, land income, as measured by cash rents, tended generally upward, and the prospective continued increase in rents was capitalized into market prices. How inadequate the surface indications of the past may be as indicators of the future is shown by the deflation of farm values beginning in 1920. Since 1920, incomes have dropped; so, too, have values. Last year's unfavorable conditions have been further reflected in declining values, despite certain appearances of stabilized values during the preceding two or three years.

In the light of the developments of the last few years farm owners, prospective owners, and mortgage holders, as well as prospective investors and others directly interested in the welfare of agriculture, would do well to consider the situation, not with the skepticism and pessimism born of past misfortunes, but in an attitude of judicial deliberation concerning the likely course of the more important factors associated with values as indicated by such information and data as are available. Such a judgment should be valuable, even though the formulation of an analysis of the situation which is adequate as an entirely satisfactory basis for a forecast would require considerably more factual data than are available at present. In such an undertaking a study of the past is helpful, not because past trends can be expected to continue indefinitely, nor because an upward trend in values may be necessarily expected on the theory that "history repeats itself," but for the simple reason that a study of the past should help toward an understanding of the laws of causality in the realm of farm-land values.

The considerations set forth above indicate that although there is no necessary fixed relation between realized incomes and land prices, there may be some similarity in their movements, not only because of the effect on purchasing power of fluctuations in income, but also because economic phenomena possess within themselves, to some extent at least, the capacity to generate the succeeding set of circumstances. The manifestations of to-day are those from which the situation of to-morrow develops. Thus under certain conditions, or in certain phases of a cycle (if the term may be used in a rough sense) a decline in prices or incomes in one year may be the forerunner of a series of low-price and low-income years, not because low prices are necessarily followed by low prices but because the forces that led to the initial low prices may require an appreciable period in which to work themselves out. Under other circumstances,

⁵ Italic numbers in parentheses refer to Literature Cited, p. 66.

unduly low prices may be the forerunners of higher prices, since they may hasten the beginning of alleviating influences.

REALIZED EARNINGS IN 1930 GENERALLY UNSATISFACTORY

Even though complete statistical information relating to the current situation is not to be had, several series of considerable interest are available. Some of the more significant of these are presented in Tables 2 to 8, and in figures 2 to 5. It has frequently been observed that in a period when the price level is rising, prices of farm products tend to rise somewhat more rapidly than prices of commodities farmers buy, and that when the price level is falling, prices of farm products are again among the first to decline. This situation is rather clearly indicated in Figure 2, in which, during the major

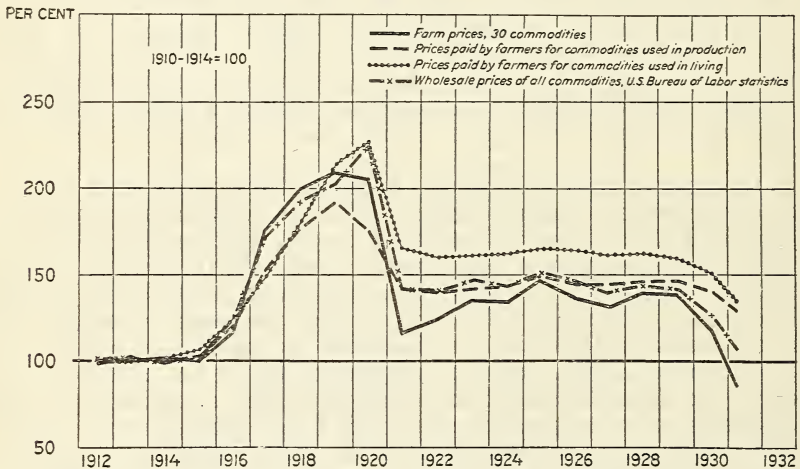


FIGURE 2.—PRICES RECEIVED AND PRICES PAID BY FARMERS, AND WHOLESALE PRICES OF ALL COMMODITIES, 1912-1931

Declines of prices to the lowest levels in recent years have been registered for practically all major farm products. Prices of commodities used by the farmer in both living and production have also declined, but not to such an extent as those of the things he sells. Wholesale prices of all commodities have remained on a higher level relative to 1910-1914 than have farm products.

part of the upward trend, the index of farm-products prices is shown to be higher than that of commodities farmers buy, whereas the reverse situation prevails after the peak.

The relation between the index of prices of farm products and the index of prices farmers pay is even more striking, expressed as a ratio of the former to the latter, as in Figure 3. Rising sharply early in the boom period, the ratio started a decline that ended only after a low point of 75 per cent had been reached in 1921. The ratio recovered somewhat in the subsequent years, only to fall to new low levels in 1931. Farm wages, too, rose rapidly during the inflation, and dropped precipitately in 1920 and 1921, but recovered somewhat and became relatively stable at some 65 or 70 per cent above the pre-war level. Another decline started as the current business depression gained headway.

In contrast both to prices of products and to prices of commodities purchased, taxes on farm property not only have remained high but have increased. The year 1930 was the first year since 1914, when the series was begun, that the bureau index of total taxes paid on all farm property showed any decrease. More detailed information of price movements of individual commodities and of commodity groups is presented in Tables 2, 3, and 4, for the convenience of readers who may wish to study specific items.

The movements of prices, as indicated in the preceding discussion and in the accompanying charts, explain in large measure the behavior of farm income. In Figure 4, the index numbers of prices of farm products and of farm real estate values are presented, together

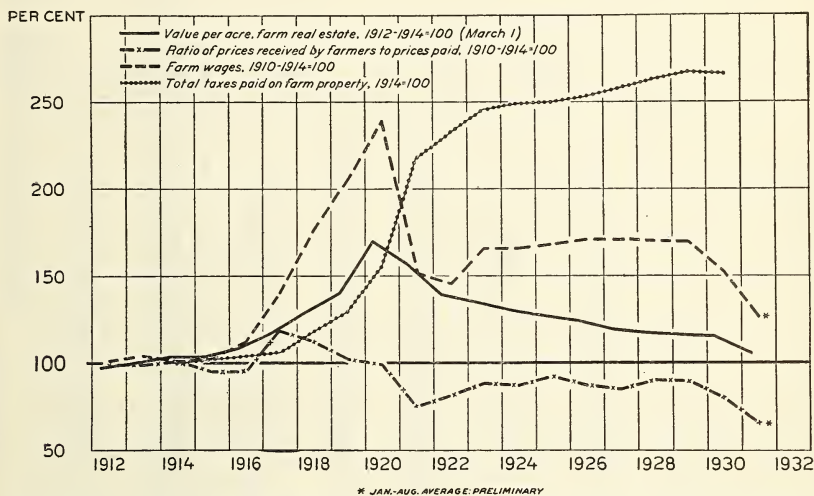


FIGURE 3.—RATIO OF PRICES RECEIVED TO PRICES PAID, FARM WAGES, TAXES ON FARM PROPERTY, AND VALUE PER ACRE OF FARM REAL ESTATE, 1912-1931

Farm real estate values, pursuing a downward trend for more than a decade, on March 1, 1931, reached a level only 6 per cent above the 1912-1914 average. At no time during the decade has the ratio of prices received to prices paid by farmers attained levels approximating those of 1910-1914. Wages of hired labor have continued higher than the pre-war level, and taxes have constituted a mounting burden on farm incomes. Decreases in values during the unfavorable year 1930-31 were unusually severe.

with two separate indicators of returns to farming. The series designated as "Net farm income available for capital and management" is the balance left from gross farm income (receipts from estimated total sales of produce plus the value of farm produce used by the farm family) after operating expenses, hired labor, taxes, and an allowance for the labor of the operator and his family evaluated at current rates paid hired labor have been deducted. It will be noticed that this item is represented by two different series. The first series, covering the period 1919-20 to 1928-29, is based on the crop year. The series now published annually in *Crops and Markets* is a revision⁶ of the other, and is based on the calendar year, with

⁶ For an explanation of the revision see (20) UNITED STATES DEPARTMENT OF AGRICULTURE, BUREAU OF AGRICULTURAL ECONOMICS, FARM VALUE, GROSS INCOME, AND CASH INCOME FROM FARM PRODUCTION, PART 1, SECTION 2, LIVESTOCK AND LIVESTOCK PRODUCTS, 1930. [Mimeographed report.]

crop production evaluated at the prices existing during the normal marketing season for each year's produce, and with livestock and livestock products evaluated in terms of calendar-year prices. The revised series is not available prior to 1924. The series "average farm returns" (Table 7 and fig. 5) is based on reports from correspondent farmers who own and operate their own farms, and consists of the difference between average gross receipts from sale of produce and the average current cash expenses of operation, together with an adjustment for change in inventory value of personal property.

TABLE 2.—General trend of prices and purchasing power by years 1910–1930, and by months September, 1929, to August, 1931

Year and month	Index numbers of farm prices (August, 1909–July, 1914=100)							Ratio of prices received to prices paid ¹
	Grains	Fruits and vegetables	Meat animals	Dairy products	Poultry products	Cotton and cottonseed	All groups (30 items)	
1910.....	104	91	103	100	104	113	103	106
1911.....	96	105	87	97	91	101	95	93
1912.....	106	110	95	103	101	87	99	99
1913.....	92	92	108	100	101	97	100	100
1914.....	103	100	112	100	105	85	102	101
1915.....	129	83	104	98	103	78	100	95
1916.....	126	123	120	102	116	119	117	95
1917.....	217	202	173	125	157	187	176	118
1918.....	226	162	202	152	185	245	200	112
1919.....	231	189	206	173	206	247	209	102
1920.....	231	249	173	188	222	248	205	99
1921.....	112	148	108	148	161	101	116	75
1922.....	105	152	113	134	139	156	124	81
1923.....	114	136	166	148	145	216	135	88
1924.....	129	124	109	134	147	211	134	87
1925.....	156	160	139	137	161	177	147	92
1926.....	129	189	146	136	156	122	136	87
1927.....	128	155	139	138	141	128	131	85
1928.....	130	146	150	140	150	152	139	90
1929.....	121	136	156	140	159	145	138	89
1930.....	100	158	134	123	126	102	117	80
1929:								
September.....	131	160	156	139	165	146	141	91
October.....	128	168	151	141	181	141	140	91
November.....	118	159	144	142	200	132	136	88
December.....	119	163	143	140	204	130	135	88
1930:								
January.....	118	167	146	135	178	128	134	88
February.....	115	168	150	129	154	121	131	86
March.....	107	169	151	126	115	113	126	83
April.....	110	187	146	126	117	120	127	85
May.....	105	193	142	123	110	119	124	83
June.....	106	193	141	118	103	115	123	82
July.....	92	173	127	115	101	99	111	75
August.....	101	149	119	117	107	94	108	74
September.....	100	148	123	123	125	83	111	76
October.....	92	127	123	125	129	76	106	74
November.....	80	114	118	124	146	80	103	73
December.....	80	108	112	117	127	73	97	70
1931:								
January.....	77	108	112	107	110	72	94	69
February.....	75	109	106	101	79	76	90	66
March.....	74	109	106	101	92	80	91	63
April.....	74	120	106	99	99	78	91	2 68
May.....	74	119	99	91	77	74	86	2 66
June.....	67	114	91	86	81	65	80	2 62
July.....	57	110	92	85	83	71	79	2 61
August.....	54	97	92	87	93	53	75	2 59

¹ The value of a unit of the farmer's product at farm prices in exchange for commodities bought by farmers for use in both production and living, at retail prices compared with pre-war values. (See Table 4.)

² Preliminary.

TABLE 3.—General trend of the prices of individual products, by years 1910-1936, and by months September, 1929, to August, 1931¹

Year and month	Relative farm prices (August, 1909-July, 1914=100)																			
	Grains					Meat animals					Fruits and vegetables ²					Unclassified				
	Wheat	Corn	Oats	Barley	Rye	Cattle	Calves	Sheep	Lambs	Hogs	Potatoes	Sweet-potatoes	Beans	Apples	Grapefruit	Oranges (Florida)	Flaxseed	Wool	Horses	Hay
1910	110	96	102	92	103	92	95	115	108	113	77	88	99	102	100	96	123	116	104	95
1911	98	90	95	119	107	86	90	91	90	87	114	104	100	107	94	94	127	89	99	108
1912	101	108	111	120	108	98	96	93	95	93	123	111	107	92	111	111	100	101	99	113
1913	90	98	91	84	88	113	111	100	103	103	87	99	96	90	102	111	69	94	100	92
1914	99	113	102	82	97	120	116	105	107	105	98	99	100	103	95	94	73	99	95	95
1915	127	112	113	93	129	116	113	116	116	91	76	97	128	77	70	91	94	126	92	88
1916	135	120	111	109	135	125	123	139	139	113	153	94	189	94	82	99	119	155	92	89
1917	230	223	161	176	220	157	155	209	207	188	271	133	324	125	115	136	168	265	94	115
1918	231	235	192	199	247	182	176	240	237	220	166	164	276	142	112	174	212	325	92	153
1919	244	243	174	173	196	187	189	211	220	224	203	181	196	193	120	164	240	287	86	173
1920	250	220	196	190	222	163	173	185	202	180	353	196	181	204	110	168	207	214	85	177
1921	132	88	89	81	141	106	117	101	122	108	149	143	126	175	92	124	89	95	65	107
1922	117	93	91	82	104	104	114	132	164	116	156	122	164	166	94	176	123	163	59	98
1923	111	125	104	91	89	108	119	145	178	98	122	126	178	146	73	133	139	212	58	104
1924	125	142	119	110	107	108	120	149	182	103	125	156	159	133	44	76	129	209	54	112
1925	171	150	112	115	135	120	131	168	208	152	163	195	175	154	73	166	145	221	55	106
1926	153	109	97	89	111	124	143	162	196	163	268	178	162	127	94	141	122	186	56	110
1927	136	123	113	108	120	139	151	159	193	134	190	130	157	129	92	132	116	174	55	101
1928	128	139	123	112	129	176	174	168	205	121	119	128	207	152	136	195	116	203	58	90
1929	116	136	111	90	121	177	180	165	202	130	134	135	242	145	81	88	145	176	57	97
1930	92	121	95	75	82	145	147	115	139	122	178	132	174	140	110	155	126	119	51	95
1929:																				
September	127	151	111	89	124	177	185	154	188	132	194	146	245	136	193 (70)	169	163	58	93	
October	126	143	112	88	125	172	180	150	186	126	198	128	235	143	119	133	178	161	56	93
November	117	126	108	87	119	166	175	148	182	118	193	111	219	141	104	104	169	160	55	94
December	122	121	169	88	123	163	173	145	182	118	194	113	200	149	106	117	170	156	54	93
1930:																				
January	122	120	108	87	119	167	175	152	188	122	198	117	194	154	108	130	165	154	54	94
February	115	121	108	85	109	167	173	150	177	131	200	125	189	160	100	122	163	146	54	94
March	104	116	104	83	95	169	167	145	163	132	196	131	187	161	160	133	155	133	55	92
April	106	122	106	84	95	166	159	142	153	127	210	135	183	166	140	198	156	120	56	92
May	99	121	102	82	89	161	143	129	151	124	215	144	195	175	140	198	145	110	56	92
June	99	123	98	77	84	153	146	121	153	126	213	146	190	181	140	198	145	108	54	92
July	80	120	83	65	61	137	136	102	137	116	186	142	153	154	140	198	114	108	51	88
August	84	140	89	70	74	123	130	91	116	118	156	155	183	111	140	198	113	111	49	95
September	80	143	90	73	74	127	136	93	113	130	158	147	185	107	140	198	99	113	49	102
October	74	128	87	68	66	123	138	86	104	121	146	126	152	102	70	130	90	110	48	103
November	68	103	79	62	58	123	131	87	105	113	136	107	126	101	55	91	79	107	46	103
December	69	101	81	63	57	122	126	87	105	103	129	107	118	103	51	68	81	103	45	95
1931:																				
January	67	96	78	59	52	123	128	89	107	100	130	112	112	108	42	57	78	98	46	94
February	66	91	77	57	48	116	121	91	112	94	124	115	115	110	38	76	75	92	47	92
March	66	90	75	56	48	116	113	93	116	96	122	120	107	110	47	86	77	89	49	90
April	67	90	76	57	46	115	109	93	118	96	130	129	101	122	51	109	76	88	49	89
May	68	88	72	57	46	100	106	86	118	88	125	131	101	127	44	107	77	81	49	89
June	59	84	65	53	44	101	101	72	109	79	108	124	98	137	37	107	71	73	47	84
July	41	84	58	48	46	99	99	66	95	86	118	115	92	112	37	107	78	71	45	78
August	40	79	50	47	45	98	100	66	90	86	110	123	91	81	37	107	71	74	44	76

¹ Product groups given in Table 2.

² Prior to 1926 included also prices of onions and cabbage. Figures in parentheses are interpolations.

TABLE 4.—Index numbers of prices paid by farmers, by years, 1910–1930, and in stated months, 1929–1931

[Base 1910–1914=100 per cent]

Year and date	Commodities used in production						Commodities bought for family maintenance ²	All commodities bought for both production and family maintenance	Wages paid to hired labor	Commodities bought for use in production plus wages paid to hired labor	Taxes on farm property ³	
	Feed	Machinery	Fertilizer	Building materials for other than house	Equipment and supplies	Seed ¹						
1910.....	92	101	97	100	101	-----	98	98	98	97	98	-----
1911.....	108	103	97	102	100	-----	103	100	101	97	102	-----
1912.....	90	100	102	103	100	105	98	101	100	101	99	-----
1913.....	108	98	104	101	100	94	102	99	100	104	102	-----
1914.....	102	98	101	93	99	101	99	102	101	101	100	100
1915.....	98	101	113	102	106	117	103	107	106	102	103	102
1916.....	129	111	122	118	129	112	121	125	123	112	119	104
1917.....	185	132	139	137	156	141	152	148	150	140	149	106
1918.....	196	160	173	161	180	188	176	180	178	176	176	118
1919.....	208	178	185	189	179	264	192	214	205	206	196	130
1920.....	133	188	189	205	188	149	175	227	206	239	189	155
1921.....	91	175	159	156	151	125	142	165	156	150	144	217
1922.....	118	156	131	159	139	133	140	160	152	146	142	232
1923.....	128	151	128	160	138	142	142	161	153	166	147	246
1924.....	135	155	122	159	131	148	143	162	154	166	148	249
1925.....	145	158	131	163	136	170	149	165	159	168	154	250
1926.....	120	156	129	163	142	190	144	164	156	171	150	253
1927.....	124	157	123	164	134	192	144	161	154	170	150	258
1928.....	133	158	133	161	131	179	146	162	156	169	151	263
1929.....	131	162	132	162	129	190	146	160	155	170	152	267
1930.....	119	159	128	158	124	169	140	151	146	152	142	266
1929:												
March.....	136	162	134	163	129	201	148	161	156	167	153	-----
June.....	128	162	134	163	129	201	146	160	155	173	152	-----
September.....	133	162	131	162	129	179	146	161	155	174	153	-----
December.....	127	163	131	162	129	179	145	160	154	159	148	-----
1930:												
March.....	120	161	128	161	126	169	141	157	151	162	146	-----
June.....	121	160	128	161	126	169	141	154	149	160	145	-----
September.....	126	160	127	156	125	169	141	149	146	150	143	-----
December.....	109	154	127	153	122	169	135	142	139	129	133	-----
1931:												
March.....	98	153	121	147	117	176	129	136	134	127	129	-----

Compiled from prices reported to the Department of Agriculture by retail dealers throughout the United States. The index numbers include only commodities bought by farmers; the commodities being weighted according to purchases reported by actual farmers in farm-management and rural-life studies from 1920 to 1925. Figures for other months used in Table 2 are straight interpolations between the above quarterly reporting dates.

¹ 1912–1914=100.

² Includes food, clothing, household operating expenses, furniture and furnishings, and building material for house.

³ 1914=100.

The average size and the average property values of the reporting farms are greater than the averages reported by the census. Few of the reports relate to farms of less than 50 acres, whereas size-groups of 100 acres and upwards are well represented. The "net returns" can not properly be considered as "average" in the sense of applying to all farmers, but they are considered to be "representative" in the sense that both large and small, profitable and unprofitable farms are included, and they are distributed over all parts of the country.

In constructing Figure 4, a "ratio" ruling has been used for the vertical scale, and the customary ruling for the horizontal scale. The ratio scale facilitates a direct comparison of the relative change exhibited by different series, by reason of the fact that regardless

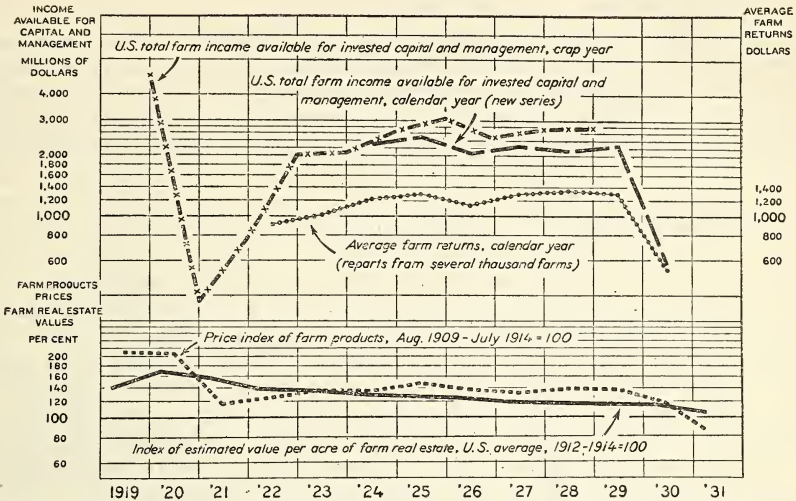


FIGURE 4.—VALUE OF FARM REAL ESTATE, PRICES OF FARM PRODUCTS, AND INCOME FROM AGRICULTURAL PRODUCTION

Serious curtailment of gross income from farm production, combined with smaller declines in operating expenses, wages to hired labor, and taxes, have brought about serious reductions in income available for capital invested in farm production. The accompanying declines in farm-land values have been very marked in many sections of the country, and for the country as a whole they average about 8 per cent.

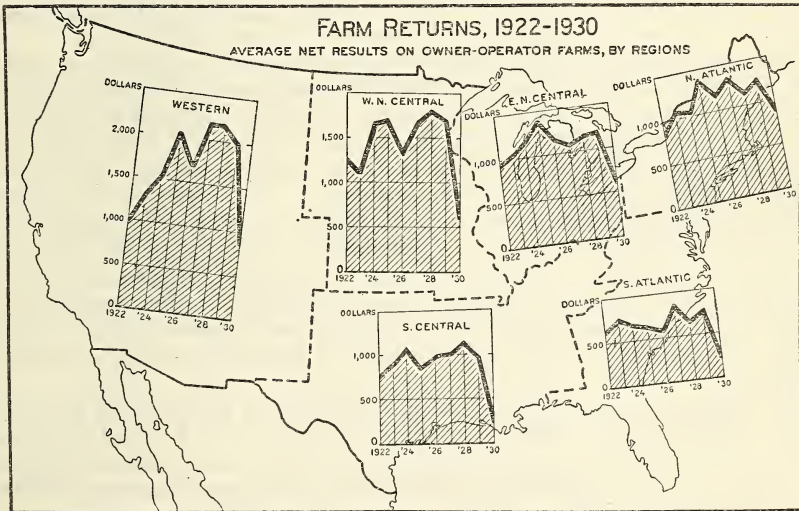


FIGURE 5.—The average operating returns for 1930 as reported by the department's crop correspondents were lower than in 1929 in all geographic divisions. In all divisions except the North Atlantic, the returns were lower than in any other year of the available record.

of the position on the chart, equal vertical distances represent equal percentage changes. For example, a change in total net farm income from \$2,000,000,000 to \$1,000,000,000 is a decrease of 50 per cent, and is represented by the same vertical distance as a change from \$4,000,000,000 to \$2,000,000,000, which is also a 50 per cent decrease. Likewise a change in average farm returns from \$1,200 to \$600 is a decrease of 50 per cent, and is represented on the chart by exactly the same vertical distance as the 50 per cent decrease in total net farm income. A 50 per cent decrease in the price index or in the index of farm real estate values would also be represented by the same vertical distance as in the preceding cases. Equal upward slopes represent equal percentage increases in the several series; and equal downward slopes represent equal percentage decreases. (It may be noted that a change from 100 to 200 is a 100 per cent increase, but a change from 200 to 100 is a 50 per cent decrease, yet both are represented by the same vertical distance.) It is evident then that the comparison which this chart makes is of the *relative* change between series, and not the absolute *amount* of change.

With the drastic declines in prices of farm products in the crash of 1921, gross farm incomes (which are not shown on the charts) decreased considerably in 1920, and dropped precipitately in 1921, but recovered somewhat in subsequent years, and during 1924 had risen to a point that compared favorably with any succeeding year. At no time since 1919, however, has the United States total gross farm income even approximated the level of that time, which has been estimated at \$15,434,000,000.

Net farm income available for all capital and management dropped even more precipitately than gross income, but made earlier progress toward recovery, although it has never since reached the level of the crop year 1919-20, and not until 1924-25 did it approach the level at which it subsequently gave evidence of stability.

During the period 1924-1929 both gross income and income available for capital and management exhibited some appearances of stability, the former in the neighborhood of \$11,300,000,000 to \$12,000,000,000, and the latter between \$2,100,000,000 and \$2,500,000,000, as indicated by the revised series in both instances. Renewed price weakness, however began to be apparent in the latter part of 1929, and land values for the year ended March 1, 1930, in some States, notably the Middle Atlantic and North Central divisions, resumed a downward trend. Subsequent developments of unusually severe price declines and one of the severest droughts in the memory of the present generation, served to reduce both gross and net farm incomes to levels not far above the lowest points following the 1921 debacle.

The estimated gross income from agricultural production (revised series) from 1924 to 1930 is presented in Tables 5 and 6. It declined from approximately \$11,911,000,000 for 1929 to about \$9,347,000,000 for 1930. By far the greater part of the decline was due to the drop in farm-products prices. Gross income from cotton and cottonseed decreased 46 per cent, from \$1,389,000,000 in 1929 to \$748,000,000 in 1930, and that from grain decreased 41 per cent, from \$1,281,000,000 to \$760,000,000. Gross income from tobacco dropped nearly a fourth, that from vegetables, fruits, and nuts, roughly a fifth, while

the gross farm income from sugar crops increased about 8 per cent, from \$97,000,000 to \$105,000,000, and total gross income from crops decreased 29 per cent, from \$5,609,000,000 in 1929 to \$3,971,000,000 in 1930. Gross income from livestock and livestock products declined only 15 per cent, from \$6,302,000,000 to \$5,376,000,000, and income from wool showed the largest relative decline, 30 per cent, that from poultry and eggs, 17 per cent, while receipts from dairy products, and from cattle, hogs, and sheep, decreased 15 to 13 per cent, respectively.

TABLE 5.—Gross income from farm production by groups of commodities, 1924-1930

Source of income	1924	1925	1926	1927	1928	1929	1930
	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars
Crops:							
Grains.....	1,755	1,496	1,432	1,592	1,513	1,281	760
Fruits and nuts.....	671	683	694	690	705	722	586
Vegetables.....	953	1,194	1,093	1,062	967	1,180	963
Sugar crops.....	104	95	103	104	92	97	105
Cotton and cottonseed.....	1,710	1,740	1,251	1,464	1,470	1,389	748
Tobacco.....	259	251	237	257	278	283	217
Other crops.....	718	689	658	648	650	657	592
Total crops.....	6,170	6,148	5,468	5,817	5,675	5,609	3,971
Livestock and livestock products:							
Cattle, hogs, and sheep.....	2,330	2,822	2,922	2,664	2,727	2,817	2,455
Poultry and eggs.....	989	1,114	1,167	1,108	1,202	1,254	1,037
Dairy products.....	1,678	1,759	1,805	1,911	1,994	2,109	1,796
Wool.....	87	97	88	86	111	94	66
Other.....	33	28	30	30	32	28	22
Total livestock.....	5,167	5,820	6,012	5,799	6,066	6,302	5,376
Total crops and livestock.....	11,337	11,968	11,480	11,616	11,741	11,911	9,347

Division of Statistical and Historical Research.

TABLE 6.—Gross income, annual expenditures, value operators' and family labor, and income available for all capital and management, 1924-1930

Year	Gross income			Expenditures				Balance available for capital, unpaid labor, and management	Value operators' and family labor at rates paid hired labor	Income available for capital and management
	From crops	From livestock and livestock products	Total	Operating costs	Wages to hired labor	Taxes	Total			
	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars
1924.....	6,170	5,167	11,337	2,705	1,206	727	4,638	6,699	4,405	2,294
1925.....	6,148	5,820	11,968	3,064	1,219	729	5,012	6,956	4,447	2,509
1926.....	5,468	6,012	11,480	2,902	1,241	738	4,881	6,599	4,534	2,065
1927.....	5,817	5,799	11,616	2,900	1,234	754	4,888	6,728	4,501	2,227
1928.....	5,675	6,066	11,741	3,146	1,228	766	5,140	6,601	4,491	2,110
1929.....	5,609	6,302	11,911	3,152	1,231	777	5,160	6,751	4,519	2,232
1930.....	3,971	5,376	9,347	2,890	1,011	777	4,678	4,699	4,096	573

Compiled from data of the Division of Statistical and Historical Research.

Operating costs, in spite of efforts to reduce them, declined only from \$3,152,000,000 to \$2,890,000,000; wages paid to hired labor declined only from \$1,231,000,000 to \$1,011,000,000; and taxes remained at the high level of \$777,000,000. As a result, the decline in income available for all capital invested, for unpaid labor of the farm opera-

tor and his family, and for the managerial effort of the farm operator, declined from \$6,751,000,000 to \$4,669,000,000. If the labor of the operator and his family is evaluated at the current wage rates for hired labor, a further deduction of \$4,096,000,000 leaves \$573,000,000 as the return to the capital and management devoted to farming—about 1 per cent on the total capital used in production, in contrast to returns ranging from approximately 4.2 to 4.9 per cent for the preceding six years.

During the period 1920 to 1931, land values traced a related but not parallel course. From a peak of 170 per cent of the pre-war base of 1912-1914, they dropped much less rapidly than income available for capital and management, to 157 in March, 1921, and to 139 in the following year. Following the apparent stability of incomes, the rate of decline fell off gradually and irregularly until, for the year ended March 1, 1929, nearly all parts of the country reported only small declines. The number of distress sales, too, had in many sections shown some tendency to diminish, although the number of voluntary transactions had shown little tendency to recover, and long-time financing of agriculture was still on a conservative basis. Although the renewed decline reported during the past year is the severest since 1922, it is not so sharp as the decline in income available for capital and management. This circumstance no doubt represents an expression of confidence that the drastically reduced incomes of the past year are not typical of what may reasonably be expected in the future.

TABLE 7.—*Farm returns: Averages of reports of owner operators for their own farms for the calendar years 1922-1930*¹

Geographic division	1922	1923	1924	1925	1926	1927	1928	1929	1930
	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>
North Atlantic.....	858	1,070	1,022	1,352	1,166	1,333	1,105	1,254	882
East North Central.....	928	1,030	1,155	1,370	1,169	1,088	1,170	1,178	604
West North Central.....	1,235	1,110	1,654	1,680	1,325	1,642	1,798	1,654	595
South Atlantic.....	623	740	656	616	569	818	639	764	214
South Central.....	735	890	1,059	824	973	980	1,121	987	217
Western.....	986	1,310	1,506	2,047	1,694	2,179	2,171	1,994	868
United States.....	917	1,020	1,205	1,297	1,133	1,290	1,334	1,298	538
Number of reports, United States.....	6,094	16,183	15,103	15,330	13,475	13,859	11,851	11,805	6,228

¹ Average gross cash receipts from sales, minus average current cash expenses, plus change in inventory of personal property. The following items are not included: Interest paid, expenditures for farm improvements, estimated value of food produced and used on farms, estimated value of family labor, including owner, and estimated change in value of real estate during year. Full details have been published for each year in Crops and Markets, the latest figures in September, 1931.

ADJUSTMENT OF EARNINGS TO VALUE STRUCTURE CONTINUES

Various other factors which have no doubt been at work, such as a tendency for real estate values to lag at the turning points, the effects of mechanization in reducing costs, deterioration of the physical plant of agriculture, and a tendency toward the writing down of values to a point at which the rate or return is more in line with those secured in alternative employment of capital, have been discussed in previous circulars dealing with the real estate situation (23, 24, 25, 26).

That the latter tendency probably is continuing in various parts of the country is suggested by Table 8. The prevailing tendency is the reverse of that which existed prior to 1920, when the anticipated increases in annual income had apparently been capitalized into values (5). The ratio of gross cash rent to the value of farms so rented in Iowa has increased from 4.4 per cent for the year ended April 1, 1921, to 6.5 per cent for the year ended April 1, 1931. This trend is probably due to several factors, among which the following are probably of major importance: (1) The expected annual increments in income experienced prior to 1920 have failed to materialize during later years. (2) The farm population, especially the younger generation, has been insisting on a standard of living more compatible with that which city people have enjoyed over the major part of the last decade. Mounting unemployment during the present depression has served, however, to emphasize the advantages of the cheaper food, fuel, and shelter available in the country. (3) An increased emphasis has been placed on earnings in appraisal for loans, and there is an accentuated realization that it is out of earnings that interest, amortization payments, and taxes must be met. Failure to provide a sufficient margin of safety between earnings and fixed costs frequently has meant that the operator's family has had to dig into the share of earnings that should have gone into living, in order to meet high fixed charges.

TABLE 8.—Ratio of average gross cash rent to average value of cash-rented farms in Iowa, 1921-1931¹

Year	Ratio of rent to value	Year	Ratio of rent to value	Year	Ratio of rent to value
	<i>Per cent</i>		<i>Per cent</i>		<i>Per cent</i>
1921-----	4.4	1925-----	4.8	1929-----	5.6
1922-----	3.8	1926-----	4.8	1930-----	² 6.0
1923-----	4.2	1927-----	5.2	1931-----	6.5
1924-----	4.6	1928-----	5.4		

¹ Preliminary figures as reported by crop correspondents.

² Revision.

BURDENSOME SUPPLY OF LAND REMAINS TO BE ABSORBED

Correspondents throughout the country, in close touch with conditions in their respective localities, emphasize particularly the difficulty of meeting taxes and interest with farm products selling at present prices. Fixed costs based on the price levels of 10 and even 5 years ago constitute a tremendous burden to debtors who must discharge those obligations in terms of commodities which have only two-thirds or less of the purchasing power they had at the time the obligations were assumed. Not only has the price level in general fallen, but as ordinarily occurs in periods of downward price trends, the prices of primary goods, including farm products, have fallen relatively further than has the average of all commodity prices. Costs to the farmers of goods used in production have declined somewhat, but not in any such measure as the prices of goods he sells.

These unfavorable price relationships, especially the critical developments late in 1930 and continuing in 1931, have contributed

greatly to the difficulty of paying interest and taxes, and to the increase in mortgage and tax delinquency which is reported. The policies adopted by mortgagees and by those administering the collection of taxes will continue to be an important factor in shaping developments of the next few years. There is considerable evidence that mortgagees frequently refrain from instituting foreclosure proceedings in cases of default, except as a last resort. Such action has probably been due in part to an appreciation of the results which would follow a rigorous and universal policy of strict enforcement of legal claims, and in part to the realization that having assumed title, the holder becomes responsible for taxes, for some attempt at operation, and for the maintenance of the physical plant.

Failure to provide for such items greatly jeopardizes the chances of eventual recovery of their investment, while taxes and the cost of supervision are not inconsiderable items. It is reported that when foreclosures have been accomplished, the former owner is frequently urged to remain as a renter. In spite of this tendency toward leniency, the number of foreclosures has increased markedly during the year, as indicated in a later section. (P. 44 and Table 11.) Mounting acreages held by involuntary owners have tended to depress values still further, not only as a result of forcing more farms upon an unwilling market, but also because it is generally feared that a normal market will not be resumed till this type of holding has been markedly reduced.

It is thus evident that the policies adopted concerning the disposition of large holdings are likely to be far-reaching in their effects. The costs of carrying and administering such land, as well as legal restrictions and more or less special considerations, have at times led to the practice of dumping, according to reports. In other cases excessive deterioration of physical plant has apparently been permitted. It is not to be inferred that this is the general policy, however. The demoralizing effect of a policy of dumping is altogether out of proportion to the quantity of land involved, and for that reason instances of such action may be overemphasized. But it should be observed that such actions serve to impair further the equity of the remaining indebted owners, and thus reduce their incentive to continue payments.

Tax-delinquent land reverting to the State tends to depress the market in still another way. State-held lands are usually tax free, so that in areas in which a considerable amount of land has already been forfeited, the tax levy on that which remains is likely to be raised, thus adding to what already is a very heavy burden, and further augmenting the forfeiture of land by owners.

RESTRICTED CREDIT A FACTOR IN MARKET CONGESTION

The discussion of the credit situation and its relation to the present land market is taken up later (p. 61), but it may be observed here that, although there appear to be some exceptions, mortgage credit is somewhat tighter than heretofore.

Loan agencies are exercising even greater care in the granting of loans. Comments indicate that in spite of some more or less isolated cases to the contrary, appraisals are more conservative, loan ratios are lowered, and considerable attention is being given to the financial

progress made by the applicant during the last few years. Such policies, although no doubt justified in the case of individual organizations, have the effect, considered in the aggregate, of adding to the difficulty of making sales, thus increasing the congestion at a time when the interests of all parties might better be served by the restoration of a normal rate of transfer of farms.

BUYERS CAUTIOUS AND INCLINED TO WAIT TURN IN MARKET

The prevailing type of sale, as discussed more fully in a later section, is frequently reported to be either in the nature of a forced transaction (the result of actual foreclosure or to avoid being closed out) on the one hand, or in the nature of an attempt to dispose of land acquired as a result of foreclosure, deeding back, and similar transactions, on the other. Some reports indicate that although most organizations are not "dumping" their holdings, they are accepting any "reasonable" offer in an attempt to liquidate them.

Buyers are said to be cautious, and to insist on being able to see their way out on the basis of earnings, before committing themselves. In the strictly agricultural sections, correspondents indicate that it is the better farms that are moving, while nearer the cities, smaller farms, suitable for a home, without the high cost of a large farm, are also in demand. Many of the "inquiries" said to be increasing in number appear to be either from bargain hunters, or from prospective owners who want very liberal terms. Other inquiries appear to emanate from prospects who would readily buy if they were satisfied that the market had struck rock bottom, but who are holding off until somewhat brighter prospects for increased earnings appear. Qualified observers report that, in many sections, values are down to a point at which, given a reasonable adjustment of prices to costs, capable and efficient management could secure a fair return on the investment. If these observations are correct, a favorable turn in the adjustment of products prices to cost items should assist materially in a beginning of the clearing up of the present market congestion. Observers in general, however, are quite specific that until the appearance of some indication of a more favorable price adjustment than that prevailing at present, farm lands are not likely to be widely regarded as a profitable investment.

Nevertheless, farms in strong hands are not for sale, and farmers who kept their balance during the boom are described as preferring to continue operation rather than to sell at the present levels. Some buyers, as a result of present low prices, are anxious to pay out on the basis of part of the produce, whether it be crop or animal products. Sellers, on the other hand, are not always so agreeable, but in some cases are apparently willing to sell on very lenient terms with rather small down payments. It is reported that farms sold on such bases in recent years frequently do not remain sold.

Depression in the cities has had the effect of sending to the country many persons who can not now find steady work. Some of this group are men who left the farm during the industrial boom a few years ago. This group is interested in buying farms, but shortage of funds greatly restricts their effective demand. City

property is frequently offered in trade by members of this group, and it is reported that many farms would be moved if the present owners were willing to accept such trades.

VALUES DOWN IN THE WEST NORTH CENTRAL STATES

Values in the West North Central States, continuing the weakness shown last year, dropped markedly. No State was exempt. Calculated as a percentage decrease from last year's levels, the declines ranged from 6.2 per cent in Nebraska to 14.0 per cent in Missouri. These declines add a fourth State, Iowa, to the list which reports average values per acre less than the 1912-1914 average. Other States already below are Missouri, North Dakota, and South Dakota. Even Kansas, which for five consecutive years had resisted depreciating values, yielded during the past year and stood only 3 per cent above 1912-1914.

Although only the southeastern portion of the area was in the more seriously drought-affected region, some adversity due to moisture shortage was felt over a considerable part of the territory. Livestock, hastened to market because of feed shortage, frequently were in poor condition and therefore did not bring top prices. Price weaknesses developed for staple crops, with the result that the gross farm income from leading crops, livestock, and livestock products for these States for 1930 was 20 per cent less than for the previous year. Prices of cost items on the other hand declined relatively slightly. The average farm return (Table 7 and fig. 5) of owner operators reporting to the Department of Agriculture dropped from nearly \$1,700 to slightly less than \$600—a drop of approximately two-thirds in one year in decided contrast to the relatively stable averages reported for the five preceding years.

The factors to which attention has been directed in preceding sections, are entirely applicable to conditions in this group of States. Low and declining prices for major farm products, both grain and livestock, have aroused great anxiety on the part of farmers and dealers alike. Failure of costs to drop correspondingly has squeezed the difference between gross income and gross expense to a critically narrow margin, and taxes have again increased slightly. The readjustment of values to rentals is apparently continuing, although complete data on this subject have not yet been developed. Continuing or increasing stringency with regard to credit on farm real estate is a factor of no mean consequence, and the large involuntary holdings of land are a source of considerable apprehension. Data on foreclosures (Table 9) do not tell the whole story, for in many cases delinquencies are not followed immediately by legal action. The policies to be pursued by large holders will continue an important factor in the situation.

An increasing interest in the renting of farms has been reported, and is no doubt closely associated with the industrial depression, and with the scarcity of funds to facilitate farm buying and the high costs of ownership. Buyers hesitate to commit themselves until they can see their way out on the basis of earnings. Another aspect of the general situation, probably inspired by the numerous bank failures, is a tendency on the part of individuals in some sections to invest their savings in productive farms.

Land values in Iowa, according to the bureau estimates, declined from 113 per cent of pre-war value to 98 per cent. Gross farm income for the State is estimated to have dropped from \$727,550,000 in 1929 to \$601,274,000 in 1930. A report from Iowa⁷ based on records kept by farmers in cooperation with county farm bureaus, the extension service and the experiment station, states that the average "net farm income" on 650 farms in 1929 was \$2,774 and for 705 farms in 1930 was \$763. The decrease of \$2,011 is attributed in part to decreased cash income and in part to decreased inventory. The report further states:

The result of these favorable and detrimental factors, while resulting in a marked decrease in farm profits, when analyzed further, show rather conclusively that farmers were really doing a better job of farming in 1930 than in 1929. When actual physical measures of livestock production are used, such as number of pigs weaned per litter, egg production per hen, etc., farmers in 1930 were fully as efficient as in 1929. In the use of labor and equipment, a higher number of crop acres per man and per horse were tended in 1930 than in 1929, and machinery costs per crop acre were reduced from \$3.57 to \$2.81. Reduced profits then were largely the result of factors, weather and prices, over which the individual manager had no control. * * *

Discussing the year 1930, the Iowa agricultural statistician (4) said:

Iowa stood as one of the favored sections throughout the entire crop season of 1930 * * *. The total crop output was only about 8 per cent below the average for the 5-year period (1925-1929). The disparity, however, between the price level at which the Iowa farmer must now sell and that at which he must buy is the significant element in the reduced farm income of the year. * * * Although the weather conditions of the year were not adverse in the extreme to the Iowa farmer, the market toward the close of the year has taken some additional and disappointing toll.

The index number of the prices for Iowa farm products for December was lower than for any month during the past six years. Price relatives for some commodities are above the 5-year base (1910-1914), particularly for hogs, cattle, corn, butter, eggs, and poultry, but below the base average for sheep and small grain.

The combined production of 15 Iowa crops in 1930 was about 20,000,000 tons, or about 8 per cent smaller than the average total of 21,800,000 tons for the 5-year period (1925-1929). Corn production fell short of the 5-year average production by 17 per cent, but the important small-grain crops were above the average by the following percentages: Winter wheat, 14 per cent; spring wheat, 4 per cent; oats, 11 per cent; barley, 14 per cent; flax, 87 per cent; and tame hay, 4 per cent. These same 15 crops in their aggregate production were 14 per cent smaller than the production in 1929.

While the total production of these crops shows only a small decrease in relation to the average, the value fell about \$95,000,000, or 21 per cent below the average due to the lower farm prices as based upon December 1 reports.

Mr. W. O. Fraser, in charge of the Des Moines office of the Livestock Market News Service, reports that the fall hog market at interior Iowa and southern Minnesota packing plants was featured by unusually wide and drastic price fluctuations, but the trend for the fall period was unmistakably lower. The supply of hogs loaded from week to week was very sensitive to market fluctuations.

An unusual feature of the fall marketing was the exceptionally good quality of receipts in the face of the relatively short corn crop. There was practically no indication of forced marketing at any time, as producers consistently topped out their droves, shipping only the hogs that were ready to go and holding back the lighter weights. Quality of receipts was uniformly good and killing yields unusually high for the fall months at a number of the interior Iowa and southern Minnesota packing plants.

⁷ IOWA STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS, EXTENSION SERVICE, 1930 FARM BUSINESS RECORD REPORT, 705 IOWA FARMS, Iowa Agr. Col. Ext. Serv. [Rpt.] FM39, 1930. [Mimeographed. Each section separately paged.]

Shipments of stocker and feeder cattle through public stockyards into Iowa during the fall months of 1930 showed a decline of about 20 per cent as compared with the fall receipts in 1929, but were only 10 per cent smaller than the past 5-year average.

Land values in Minnesota underwent the greatest declines in nearly a decade, approximating 13 per cent of last year's levels. Severe price drops for leading products dealt a hard blow to the farm income of the State. Prices of milk, butter, hogs, and cattle, as well as of grains and poultry products, underwent continued and appreciable drops. Concerning the situation, the State agricultural statistician said (15):

The gross farm income in Minnesota for 1930 was around \$220,000,000 less than in 1929. This is for crops, livestock sold, January 1 livestock inventories, and milk and egg production.

If Minnesota farmers had received this \$220,000,000, a goodly amount of it would have been spent for the payment of debts, new farm machinery, improvements, and no doubt in many cases a new automobile, and the necessary upkeep thereof.

Of course, taxes must be paid, interest when possible, and other necessary expenditures, but as a whole they are pretty firmly imbued with the idea that it is not the time to purchase any more than is necessary. Tax rates have not come down, and about 90 to 95 per cent of the direct levies are against real estate.

Minnesota is not in as bad shape as one might infer, however. They have plenty of feed for livestock as well as seed. More livestock were on farms January 1 this year than one year ago, so no money will have to be spent in the replenishment of herds.

The situation with respect to land sales appears typical, with markets slow, forced sales occupying a prominent place, and although some sales are made, buyers as a class are holding off, awaiting developments. Some unemployed persons leaving the city, among whom are former farmers, express interest in buying, but are short of money. Such cases no doubt contribute to the rental demand; high taxes and low prices for farm products discourage purchasing.

Missouri, somewhat harder hit by the drought than other States of this group, also suffered serious price declines, with land values dropping over 14 per cent from last year, to only 79 per cent of the pre-war base. In reviewing the general situation the State agricultural statistician reported (16):

Missouri farmers are fast recovering from the drought of 1930 and the depression which it occasioned. Quite general optimism prevails. While subsoil moisture is deficient, enough rains and snows have fallen recently to relieve surface conditions, also providing needed water for livestock.

Livestock are thin in flesh but healthy. Farmers have fed sparingly of hay and forage feeds until now; with early grass, livestock will come through without distress. Further delay might cause losses in the southern half, but the northern counties still have considerable hay and rough forage.

Land prices are down from last year, with very few sales. Rents are considerably off from a year ago, with the greatest demand for small farms of 80 acres or less.

Farm wages show a decrease since January 1 and a sharp decrease since a year ago. Supply of farm labor is probably 50 per cent in excess of the demand.

The estimated gross farm income in Missouri dropped from \$420,388,000 in 1929 to \$329,840,000 for 1930, while cost elements failed to respond in like degree.

The land market is reported generally dull, with occasional expressions of confidence in the future, but buyers generally are critical, and are looking for bargains. Bank failures in some sections have encouraged farm buying. The depression in the cities is encouraging some to think seriously of the farm, but the effective demand seems rather slight.

Conditions in the Dakota land market are similar to those elsewhere, with low prices bringing tremendous pressure on the indebted land owner and depressing values to the lowest levels in many years. A moderate rental demand in some sections is reported. Commenting on the farm real estate situation, the North Dakota State agricultural statistician said:⁸

The farm price situation has, of course, been the principal cause for the large decrease. Very little land has changed hands through actual sale, but tax sales and foreclosures have been numerous. * * * Legitimate transfers are usually on the crop-payment plan, with from 5 to 20 per cent as an initial cash payment. In some cases interest is waived, according to reports. Some speculators appear to be watching the land transfer situation closely with a view to picking up occasional bargains. * * * What demand there is at the present time for farm lands seems to be for improved farms, with only an occasional buyer looking for the unimproved tracts.

Kansas and Nebraska values, heretofore fairly resistant to decline, yielded to low prices of farm products, although the drops were somewhat less severe relative to last year's levels than in the other States of the section. The Kansas State agricultural statistician (17) reported:

The Kansas 1931 * * * winter wheat came through the winter with little loss of acreage and in above average condition.

Oats, barley, potatoes, and some farm gardens were planted unusually early and under favorable conditions. A larger acreage of early potatoes was planted in the Kaw Valley. Due to mild weather, much plowing for spring crops was completed early and the soil was in optimum condition to absorb March precipitation, which was double the normal amount. Moisture supplies are adequate over the entire State.

During the closing days of March western Kansas experienced one of the worst blizzards in the history of the State. Temperatures dropped to zero and lower. The storm came on rather suddenly, with the result that much stock was caught away from shelter. Losses of cattle are estimated at from 10,000 to 15,000 head, and some hogs, sheep, and poultry were smothered in the snow, which drifted badly, with accompanying high winds.

The number of cattle on grain feed April 1 was considerably smaller than on this date last year. Farmers and large feed-lot operators are continuing to feed wheat to all classes of livestock, and the quantity fed from the 1930 wheat crop will without doubt be the largest on record.

Gross farm income dropped from \$457,893,000 in 1929 to \$377,394,000 in 1930 in Nebraska; and from \$436,991,000 to \$342,370,000 in Kansas. Observers are watching with particular interest the developments in the price situation and the attempts at large-scale and low-cost wheat production in western Kansas and Nebraska.

RENEWED DECLINES IN VALUES IN THE SOUTH ATLANTIC STATES

As in most other parts of the country, the year 1930 brought to farmers of the South Atlantic States considerably reduced incomes. The average farm returns (Table 7 and fig. 5) reported to the Department of Agriculture by correspondents dropped from \$764 for

⁸ KIENHOLZ, B. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

1929 to \$214 for 1930. The 1930 return is by far the lowest reported since 1922, the first year for which the series is available. It may be accounted for in part by the drought, which affected adversely portions of Maryland, Delaware, Virginia, and West Virginia, and in part by declining prices, which affected nearly all parts of the area, but with varying intensity. The net effect on gross income was a reduction of 18.9 per cent, from \$1,343,292,000 in 1929 to \$1,089,889,000 in 1930.

All States in the group reported declines somewhat in excess of those of the previous year, the greatest drops occurring in those States in which agriculture is centered around the production of cotton, and in Virginia, where the drought was particularly severe. Attention is, moreover, frequently directed to the difficulty of appraising the present value of land, owing to the scarcity of bona fide voluntary sales by which to judge the market.

Taken as a whole, the farm-land market is very quiet. The reduced incomes of last year have contributed to delinquencies, and these in turn have led to marked increases in forced sales, even though mortgage holders are reported as tending to withhold legal procedure. Forced sales exert an extremely depressing effect in the market, and during the year are said to have constituted an unusually high proportion of total transfers. It is stated that foreclosed farms have been sold at prices that did not cover the investment. Just how much land remains yet to be sold by the sheriff before liquidation is completed is unknown, but correspondents express anxiety about the effect of continued low purchasing power of farm products. More encouraging is the report that, on the whole, farms in "strong hands" are not for sale under present market conditions.

Buyers are cautious, and the increased stringency in farm-mortgage credit, as witnessed by lower appraisals, reduced loan ratios, a general raising of requirements, or even by the withdrawal of certain agencies from some sections, further contributes to market stagnation. It is frequently reported that "it is cheaper to rent than to buy" at the present high costs of ownership, and a moderate increase in demand for rentals seems to be indicated.

Demand for rentals is far from uniform, and reporters call attention to sections where land is lying idle, to others where there is difficulty in renting for enough to pay the taxes, and to still others where tenants are asked only to live on the place and raise a garden with no attempt at farming. In some sections abandoned farms appear to have been occupied by some of the unemployed who would otherwise be without food and shelter. But here and there brighter spots stand out, as correspondents in some sections mention that specialty or truck farmers have apparently done better than the majority during the year, others that more land is being planted than last year.

Commenting on the situation during the past year, the West Virginia State agricultural statistician⁹ reported:

There has been very little activity in the farm real estate market during the past year due possibly to the discouraging features of farming at the present time. Crop production was cut between 40 and 50 per cent, due to the worst

⁹ McDONOUGH, T. F. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

drought in the history of the State, together with a low price level of farm commodities and the present high rate of taxation.

From the Virginia statistician comes the report (11):

The brightest spot on the agricultural horizon in Virginia is the break in the State's record drought. Although several light rains fell over most of the State during March, the month ended with an accumulated deficiency in precipitation of nearly 22 inches during the past 16 months in which rainfall continued well below normal. The first few days of April, however, witnessed general rains over the entire State, which have added considerably to soil moisture and brought the flow of streams back to near normal.

The drought of last year may have had one favorable feature, in that it now appears, from expressions of intentions to plant, that Virginia farmers will devote more time and acreage to the food and feed crops and less to the so-called cash crops. * * * Real estate men are of the opinion that very few farms will change hands during the present year.

An example of the lack of uniformity in the current situation is found in Georgia, where the State agricultural statistician reported¹⁰ that northeastern Georgia underwent severe damage from drought in 1925, with a subsequent readjustment on a more conservative basis, with the result that the section was in better shape to stand last year's experience. The section devoted to peanut growing also suffered somewhat less, as peanut prices were less reduced than those of cotton. Continuing further, he said:

Unfortunately the above does not apply for the remainder of the State. Low prices of cotton, tobacco, and other cash crops have placed a large number of farmers in sorry financial plight. It is reported that loan companies are generally extending lenient terms to farmers behind with interest payments who are considered good moral risks. Also (it is reported) firms that have had to foreclose and hold lands for the past several years have not lowered prices asked for such farms, although there is little demand. This latter would appear to indicate that these companies believe values have about reached the lowest ebb and are holding steady until times improve.

From Florida comes the report that the effects of the removal of the fruit-fly quarantine, which under average conditions might have ameliorated conditions somewhat, were counteracted effectively by the reduced prices. The production of grapes and tung oil appear to have possibilities for lightening the burden on citrus growing, while sugarcane, truck, and melons also receive frequent mention.

SEVERE DECLINES IN VALUES IN THE SOUTH CENTRAL STATES—COTTON PRICES AND DROUGHT REDUCE INCOMES

Taken as a whole, the declines in values in the South Central States were of approximately the same severity as declines in the North Central States, with respect to percentage decline from the preceding year. With respect to pre-war levels, the declines in the South Central States were more severe than those in any other section. Even so, values in the South Central States average higher as compared with the 1912-1914 level than do those of any other group except those of the Pacific and Northeastern States. For no State in these groups has the index of values fallen below 112, while 15 States in other sections report average values less than pre-war values.

Some States in these sections were perhaps more adversely affected by the drought than were most other sections, and low prices for

¹⁰ FLOYD, D. L. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

staple crops combined with other adverse conditions to reduce gross income 30.6 per cent below 1929 in the East South Central States and 34.3 per cent below in the West South Central States. Farm returns of correspondents (Table 7 and fig. 5) dropped from an average of \$987 in 1929 to \$217 in 1930.

Commenting on conditions in Kentucky, the State agricultural statistician said (3):

Kentucky farmers are entering the 1931 crop season apparently intent upon enlarging their acreages of crops and increasing their production of both crops and livestock in the effort partially to overcome the severe losses due to the drought.

The drought of 1930 was a disaster producing suffering and loss to an extent not generally comprehended in other parts of the country.

The general financial condition of farmers in this State is poor, yet actual delinquencies and foreclosures have not been as severe as might have been expected, especially when it is considered that the already bad agricultural conditions and damage from drought were still further accentuated by many bank failures, from very small ones up to the largest national bank in the State with fifty-odd millions of deposits, whose failure was not due to agricultural conditions.

The 1930 crop of tobacco brought disappointing prices. * * *

Production of something like three-quarters of a million spring lambs has proven profitable, chiefly in central and northern counties, even despite lower 1930 prices, and a large lamb crop of excellent quality is now coming on.

Land values have declined badly, and indebtedness is slow to be paid off, yet actual foreclosures and delinquencies have not been quite so bad as might have been expected after such a series of disasters, local as well as national, to agriculture.

In brief, the Kentucky farmer is down and groggy, but he is coming up fighting. Many have gone down permanently, but the mass are holding on, grimly determined to try to fight it through, on short rations, with lowered standards of living, and affording lowered outlets for manufactured commodities.

The situation in the Tennessee farm-land market is described as follows by the State agricultural statistician:¹¹

Correspondents report very few transfers of farm property, most of which are to satisfy the first mortgage. A large number of mortgages are held by insurance companies, but relatively very few foreclosures have taken place, because the creditor knows that most of the lands could not cover the mortgage and the present owner is probably better suited to run the farm than anyone else whom the companies could secure.

Small improved farms, near schools and highways, are most in demand. Due to better seasons last year in this part of the State and relatively good prices for Burley tobacco, land is most in demand in east Tennessee.

Demand, as far as purchasing is concerned, is very low on account of the general depression and low prices for farm products. However, there is an actual demand for the land itself by tenants and others who can not keep soul and body together in the cities and who are now crowding back to the farm and begging the owners to provide an abiding place on a few acres. The sentiment is crystallizing that just as soon as industry and costs of distribution adjust themselves down to the basis of farm products and world conditions, the demand for farm land will be greatly improved.

The exceedingly trying situation in Arkansas, increased by the drought, has been described by the Arkansas State statistician:¹²

Arkansas was more profoundly and adversely affected by the great drought of 1930 than any other State in the Union. It was the only State entirely covered by drought conditions. The drought lasted longer and the heat was more severe in this State than in any other. Hence, all crops which matured after

¹¹ MARSH, S. J. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

¹² BOUTON, C. L. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

the drought had become menacing were adversely affected and the value of all crops, as compared with the 1929 value, was only 43 per cent. Some of this loss represented decline in values, but most of it was due to lack of production.

This situation has called for relief by the Red Cross and other agencies and financial assistance from Federal and other sources. The loss in income caused many banks to suspend, and this has also had a depressing effect on farm-land values.

In a further report he continued (2) :

It is estimated that it took about \$75,000,000 to finance the farmers of Arkansas for the 1930 crop. Allowing for differences in cost, it was estimated that it would take \$60,000,000 this year. The 1st of January it looked as if not more than \$25,000,000 of that could be had, but Federal aid, intermediate credit banks, and other measures have doubled this amount. In other words, 80 per cent of the desired credits are, or will be, available. This 20 per cent shortage will mean two things: Curtailment of programs by those who depend upon credit for financing their crop plans, and reduction in the number of actual tillers of soil by virtue of inability to procure credit.

Land values and rents have declined, * * * but there will be a certain offset to the decline in farm numbers by the tendency of some town and suburban dwellers to secure places in the country where living is cheaper.

Morale was at a minimum about the 1st of February, but with the increase of credit facilities, hopefulness and confidence have increased, and morale to-day is not far below normal. In other words, our farmers are facing facts as they are and are making their plans to harmonize with the facts. They plan to make a living rather than attempt a campaign of heavy production in order to stage a quick comeback.

Louisiana, too, reports some movement back to the farm as a result of the industrial depression, and points to an increased rental demand in some sections as an encouraging sign. Land in the section devoted to growing the Porto Rican yam is reported to be in considerable demand, and some other sections report that land is being diverted to timber.

The State agricultural statistician reports:¹³

Land values have materially decreased during the past year in this State. The primary reason for this decrease is undoubtedly the general financial depression affecting adversely the whole country. There are other reasons, however, for the decline, among which may be mentioned the disastrous drought which prevailed over the northern section of the State during the summer of 1930, the lack of demand for farm lands, and the unsatisfactory financial condition prevailing generally.

There is not much activity in the farm real-estate market at present. However, many investors realize that the present is a good time to buy, and some holders of large farm properties are endeavoring to dispose of excellent Louisiana farms to northern buyers who are looking for good investment opportunities. The farms being offered for sale are mostly large plantations.

During the last two or three years it has become necessary for the large financial institutions in this territory to take over much agricultural property, because the owners were unable to meet payments of principal and interest as they fell due. The holders of these "distressed" properties are endeavoring to dispose of them for such sums as will meet the principal and interest which has accrued against the properties to date.

The situation with respect to the farm-land market of Oklahoma has been described in some detail by the State agricultural statistician as follows:¹⁴

Land values have declined generally over the State during the past year, varying from just a slight decrease to a drop of one-third of values in 1929.

¹³ JANES, L. L. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

¹⁴ BRYAN, S. L. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

There are many causes for this decrease in land values. Low prices for agricultural products and high production costs are the principal reasons for the decline. Cotton and wheat are both highly important crops in Oklahoma, and these two crops have declined more in market value than any other crop. Among the production costs, those which appear most out of line are farm machinery and land taxes. Prices of farm machinery and implements have failed to show a decline proportionate with agricultural commodities, and land taxes have steadily increased. As the demand for farm lands comes primarily from farmers, the depletion of the purchasing power of farmers has, of course, caused farm-land prices to sag. Because of poor prospects for future returns, farm lands have become undesirable in the eyes of speculators and speculative demand has also decreased.

In Oklahoma, crops and livestock are not the only sources of farm income. Oil and the prospects for oil play important parts. For several years some farm lands in practically every section of the State have been leased for oil, even where no drilling for oil has taken place. The price of these outlying oil leases varies from just a few cents to several dollars an acre. The proration of oil flow this past year has caused a curtailment of drilling in proven territory and almost a cessation of drilling in wildcat territory. This has caused the value of leases to drop and has caused oil operators to fail to renew lease holdings, with a consequent decline in the value of the farm lands affected. * * *

The State farm-loan companies have raised their interest rates and are at present lending only on the best class of lands. Farm-land values are in many cases barely equal to, or are lower than, the present loans on them. Loan companies are very reluctant to foreclose on past-due mortgages, but are inclined to carry them along in this shape, provided the interest payments are met. The money stringency thus makes the sale of farm property difficult, even if there were a demand for it. Refinancing of farm loans at this time is almost an impossibility.

Foreclosures on farms during the past year were a little heavier than in 1929, but foreclosures are rare even during present times. Farm loans approaching maturity which can not be met by the landowners are usually taken care of through "distress" sales if the owners' equity is relatively large. If not, the mortgagee is usually willing to accept a deed to the land in payment of the mortgage against it. In cases of default this procedure is customary with loan companies.

Those buying farms at this time are composed of speculators who apparently think that land values will rise; homeseekers, who buy the land merely for a home site; and men from the cities and towns who have become discouraged with conditions there and now want to try living on the farm.

The Texas State agricultural statistician (18) reported:

Nature has been kind to Texas farmers during the past winter and early spring. Last fall moisture supplies were deficient and stocks of winter feed were low. Now moisture supplies are above normal, and a mild, open winter with grass about 30 days earlier than usual has turned what appeared to be a shortage of feed into a surplus.

Wages for farm labor and prices of things farmers buy are lower than a year ago. Farmers are doing as much of their own work as possible, and hence there is a large surplus of farm labor. Crops this year will be produced at an extremely low relative cost per acre.

A live-at-home sentiment has developed, and a large increase in acreage for food for the family and feed for the farm livestock is in prospect.

Land values are * * * lower than a year ago, with the farm real-estate markets stagnant. Buyers with money are very cautious and are buying bargains only. Farmers who would like to sell can find no buyers who are willing to offer what is considered a fair price. There are a few well-to-do farmers and still fewer speculators who are looking for real bargains in good lands at foreclosure prices only. Generally, however, the market has no friends.

Crop and farm real estate loans are difficult to obtain. With many old farm loans outstanding, banks and loan companies are reluctant to advance additional funds, particularly in the areas where severe drought damage occurred last year. The general policy of loan companies holding mortgages on farms is not to foreclose if the faintest effort is made to pay the loan or even the interest, because they can see no advantage in foreclosing and incurring the burden of taxes when land prices are so low and no buyers.

VALUES DOWN IN THE EAST NORTH CENTRAL STATES

With values in several of the East North Central States already below pre-war levels, renewed drops placed values in three of this group at approximately four-fifths or less of pre-war values. Gross farm income decreased 20.1 per cent, from \$2,142,511,000 in 1929 to \$1,711,410,000 in 1930, and average farm returns of correspondents reporting to the Department of Agriculture dropped from \$1,178 to \$604. (Table 7 and fig. 5.) The reduced incomes of last year have led to increasing difficulty in meeting interest and taxes, with a corresponding increase in delinquencies and foreclosures.

At the same time, the industrial depression has apparently resulted in a rather definite back-to-the-farm movement, which has contributed to a rental demand and has probably had a definite psychological effect in that farmers see that, so long as taxes and payments on encumbrances can be taken care of, they at least have shelter and a place to raise a substantial part of their food requirements. The demand for rentals has not yet crystallized into a definite buying movement, according to local dealers, partly because of inadequate purchasing power on the part of those returning from cities and the accompanying difficulty of financing; partly because prospective buyers seem to be waiting the turn of the market; and partly because, according to some observers, it is cheaper to rent than to own under present costs of ownership.

A general feeling is evident that if prices of products resume higher levels, progress can be expected toward clearing up the present congested market.

Conditions in Ohio have been summarized by the State agricultural statisticians (19) as follows:

Ohio farmers for the first time in many months are feeling more optimistic. Farmers began the fall and winter with a reduction of feed supplies in most sections of the State, due to the drought (especially in the southern part).

The fall and winter proved to be very mild, which lessened feed requirements and brought livestock through the winter in good condition. The drought continued through the fall and winter. However, this proved very beneficial to the winter wheat, since there was a light snow cover and the dry ground did not heave as usual, causing abandonment.

The relatively dry fall and winter with moderate temperatures have been very favorable for farming operations. The amount of plowing completed up to mid-April was well in advance of years past. * * * * *

In Indiana vigorous attempts to cut production costs and to make the best of the situation are indicated in the following report (13):

Indiana farmers are making unusual efforts to produce a low-cost crop. Less labor than usual is being hired, and horses which must be fed in any case are being used for plowing, to obviate cash outlays for tractor fuel. The mild, open winter, with plowing possible nearly every month, furthered attempts to utilize home labor and supplies.

The pig crop seems good, but lambing percentage is hardly up to last year. Market prices for all commodities are rather low.

Land values have declined in the past year, as both buyers and owners are giving more weight to current returns in computing values than for many years. An unusual demand for places to live on farms from men thrown out of city employment is evident. This has not affected rental rates much as yet but has affected sentiment among farmers.

Those able to meet their taxes do not feel so badly off, in spite of low markets, when they consider the plight of those forced from the cities onto the poorer farms of their communities.

Values in the various sections of Illinois moved rather unevenly downward. Values in the northern part declined severely in contrast to the resistance shown in previous years, but the lower west-central and southwestern areas reported smaller declines due to better crop, livestock, and feed situation and considerable previous deflation. Lower east-central and southeastern values were adversely affected by poor crops and prices, bank failure, and credit restriction. The State agricultural statistician sums up the market situation as follows:¹⁵

The heavy slump in Illinois land values was largely due to the severe reduction in farm income over most of the State on account of spotted crop yields and heavy slump in market prices for farm crops. Other contributing influences were severe credit restrictions, scattered bank failures, tendency to foreclose rather than renew mortgages, business depression, tax burdens, and increased loss of confidence in land values by farmers and investors.

Comments are frequent that it is very difficult to make an intelligent appraisal of values, as about all the land changing hands represents distress sales at bargain prices. Land held in strong hands would not be sold at twice the figure secured at forced sales in the State. * * *

There is some tendency toward a back-to-the-farm movement due to city unemployment conditions, but the majority have little or no capital and are looking either for employment on farms or for farms to rent. It is evident that in times of distress self-preservation is a more intense and discouraging problem to many in the cities than on farms.

In Michigan¹⁶ (where values have held up rather well until the past year, when a marked decline occurred) there seems to be a slight renewal of activity in the farm real estate situation this spring. The demand has increased somewhat over a year ago, and while the call is still largely for small acreages near the cities, there is a noticeable tendency toward larger farms and those farther removed from urban areas. Farms in the north-central part of the State attract more consideration from buyers than was formerly the case. At the same time there has been some increase in the proportion of outright sales, as compared with exchanges of city property for farms. Buyers still consist largely of persons who left the farm several years ago to work in industrial plants and who are being forced by present conditions to return to the farm to earn a livelihood. In some sections, however, farmers themselves are taking advantage of the lower prices to expand their acreages. Notwithstanding the unfavorable 1930 crop season and the declining price level, there is a feeling of optimism as to the future of farming. This is engendered by the fact that the farmer in spite of his reverses is in a better situation than the average industrial laborer. However, the increase in demand has not been great enough thus far to effect any marked change in either terms or the number of foreclosures. The terms offered by sellers are still very easy. Debtors or mortgagors are keeping their taxes and interest paid up, and mortgage holders are loath to foreclose.

There are a few notes of optimism (12) in the present outlook in Michigan, in spite of the general gloom caused by the drought and depression. The mild winter resulted in a relatively light consumption of feed supplies, favored dairy and poultry production, enabled livestock on feed to make good gains, prevented a heavy abandonment of wheat, and allowed orchards to come through with very little winter injury. Farmers were planning on increased acreages of corn, oats, barley, and potatoes.

Wisconsin, another State which held up fairly well till last year, reported severe drops in land values, with the general situation described as follows (9):

Wisconsin was one of the few inland States with above-average crop yields in the drought year of 1930. * * *

¹⁵ Surratt, A. J. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

¹⁶ Holmes, I. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

Land values have continued to decline during the past year, apparently at an increasing rate. Practically all parts of the State have been affected by these declines, but they seem to be more severe in the less developed and less productive agricultural regions, where inflation had probably carried land values farther out of line with their productive capacity, than in the better soil regions. Apparently there will be fewer idle farms than a year ago, due primarily to the unsatisfactory employment condition in industry.

The farm price index for Wisconsin last month stood at 98, or two points below the 1910 to 1914 average. This is the first time this index has been below 100 since 1915. Since about half of the State's farm income is obtained from milk, the State price index follows pretty largely the trend in milk prices, and the index of milk prices in March, 1931, also stood at 98. It is significant that the index of grain prices in the State stood at 70, while the index of milk prices stood at 98 and that of livestock prices at 94. Concurrent with this price situation, the major acreage increases are developing in our feed grains. Cow numbers are still increasing.

SLIGHT CHANGE REPORTED IN VALUES IN THE NEW ENGLAND STATES

In New England, values compared somewhat more favorably with those of previous years than did values in most other sections. Although low prices were received for a substantial portion of the produce from these States, and although gross income from production was 12.4 per cent lower than last year, the number of forced sales declined slightly, and the number of voluntary sales remained practically unchanged.

In general, the major aspects of the farm real-estate market are comparable with those of last year. Abandonment of back farms, as well as forestation, appears to be continuing, and the conversion of former farms into golf courses, summer homes, country estates, etc., is still exerting a somewhat stabilizing effect on values. The industrial depression has served to stem the tide of young people going to the city and has brought about a definite countertrend on the part of persons who are anxious to cut down living expenses or who have been forced to seek a livelihood elsewhere than in the cities. The demand of this group of prospective buyers is usually for small farms, and the emphasis placed on location with respect to town and good roads varies according to the financial strength of the prospect. Since many such inquirers have probably been out of work for some time, savings have been somewhat depleted, the proffered down payments are frequently small, and city property may be offered in trade.

In many cases the demand is for rental rather than for purchase. In general, the effect of the depression seems to have been chiefly to increase rental demand without resulting in a marked increase in either the number of actual sales or the market price.

Nevertheless, some demand for specialty or truck farms in good locations has been reported, and those who are not forced to sell are inclined to hold on to their property and to adjust their operations to meet present conditions.

Factors operating on land values in these States are variegated in the extreme, and the situation is spotted, rather favorable reports in some districts being approximately offset by more unsatisfactory conditions elsewhere. Generalization is difficult.

As indicated in last year's report (26), correspondents were requested to base their reports of value of farm real estate upon land used for agricultural purposes and to "exclude from consideration all properties used or held for suburban, resort, country home, timber, mining, oil, factory, or other purposes primarily nonagricul-

tural." Nevertheless, in some sections, especially in the North Atlantic States, there are many border-line cases; it is difficult to determine clearly just where value for farming stops and where value for other purposes begins, because of the continuity or overlapping of areas and the competition of the various uses. Because of this situation, the estimates of value may reflect the effects of other than strictly agricultural uses. In such areas land now being farmed is probably held at valuations higher than are justified on the basis of such use, largely because it is hoped by the owner that the land eventually will be absorbed for a purpose that will permit of the higher valuation.

VALUES IN MIDDLE ATLANTIC STATES LOWER THAN LAST YEAR

Farm real estate values in the Middle Atlantic States as a whole declined further than in any other year since 1922. The decreases were not so severe as in the majority of the States of the North and South Central and South Atlantic divisions. Declines in earnings, too, although not so severe as in these other sections, were far from satisfactory. Gross income from farm production declined 10 per cent, from \$913,975,000 in 1929 to \$822,871,000, in 1930. These declines combined with the continued high fixed charges of taxes and interest and with cost items only slightly reduced, appear to have been reflected in fewer voluntary sales rather than by a marked increase in total number of forced sales. The real estate situation in Pennsylvania is described as follows by the State agricultural statistician:¹⁷

The downward trend in values this year results not only from the surplus of farms for sale over the potential demand, but from a general decline in real estate values as a result of the general depression. In many sections of the State the depreciation of farm property this last year was not nearly so heavy as for city property. Inability to produce profitably at the low prices for farm products, demand for which has been curtailed by the reduced purchasing power of the consumer, with no immediate relief in sight, encourages the placing of farm real estate on the market. Oppressive taxes are the chief source of complaint, and to meet this item too frequently the buildings have been neglected and the soil robbed.

Despite an increasing number of inquiries, activity in the farm real estate market is very slow. Only in the Philadelphia area does trading show any improvement over the last few years. A ray of hope is seen in a few other sections of the State, where development or expansion in some industry other than agriculture is anticipated.

The kind of farm demanded, the character of transfers, and the qualifications of the prospective purchasers do not augur well for either agriculture or the agriculturist in many sections of this State. As a rule, the farm must be small—from 3 to 60 acres; cheap—usually not in excess of \$3,000 in value; near a city, on an improved highway, something adapted for diversified farming, but more frequently suitable for poultry raising, trucking, or fruit growing, with occasional inquiries for suitable roadside markets or gasoline-station locations. There are a few inquiries for farms of 100 or more acres in the southeastern counties, suitable for dairying, and then an occasional inquiry for large farms, something suitable for elaborate country homes. All these fields, with the exception of the last, seem to be overdeveloped already, especially if operations must be conducted on a small scale.

In some sections of the State the only transfers result from exchanges for city property. Outright sales usually are made on the basis of very small cash payment—from 10 to 50 per cent of the purchase price, the balance on convenient terms, drawn out over a long period of time and the seller carrying the mortgage, as the sources of loans on farm real estate without other collateral are quite generally dried up. Under such conditions, an increase in the burden of indebtedness on the rural people seems inevitable.

¹⁷ GASTEIGER, E. L. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

Who is doing the buying? In the immediate vicinity of Philadelphia, a few speculators, some commuters, or others accumulating extensive country estates. Elsewhere in the State, people from mines and industries where work is slack, who have saved a little money, and elderly people in the cities who fear the loss of their jobs with the approach of old age, together with a scattering of bona fide farmers, make up the bulk of potential purchasers. Invariably the motive is to supplement the present inadequate income or to extend the life of savings accumulated for old age. * * *

The opinion prevails that acquisition of real estate, both urban and rural, should somehow be facilitated by easier credit and that ownership should be made less burdensome through intelligent taxation.

A dull market for farm property is reported from New York, although some correspondents report improvement. Increased demand for rentals, largely on account of unemployment in the city, is reported from some sections, but prospective buyers are frequently poorly financed and are anxious to get rock-bottom prices. But farmers are carrying on, with the knowledge that other States have been hit harder by the depression. The State agricultural statistician describes the farm situation as follows (10):

With the general realization that agriculture is in a period of depression which is running parallel with industrial depression, most farmers are facing the situation squarely and are going into the new season with the general attitude that, discouraging as things are, there is nothing to do but to go ahead. * * *

There is little alternative other than to go ahead on fruit crops as usual, although here and there the size of cash reserves and the fact that credit has been extended to the sale limit may curtail the spraying and tillage of orchards.

Potatoes, although cheaper than was hoped last fall, have held up relatively well in price, and early intentions were for increased acreage this season.

The price of milk, which slumped sharply early in the winter, has continued low.

On the pessimistic side, further, is the fact that, in spite of sharp reductions in farm wages, labor costs are still high compared with farm produce; many of the things farmers buy (mostly at retail) are high; services in connection with processing, shipping, and selling their products are high; taxes have risen to high levels, and because of the nature of Government and the long-term bonds now being paid off, they can not fall rapidly; debts contracted at a high-price level have to be liquidated with low-priced farm products, while the value of the land and equipment declines.

In comparison with farmers in some of the States that have fared less favorably and with that part of the nonfarm population which has been especially hard hit by the depression, there is a general tendency to say, "After all, it might be worse."

VALUES IN THE FAR WEST AGAIN TURN DOWN

In common with the agricultural sections, those of the Mountain and Pacific States experienced considerably reduced incomes, due in part to price declines and in part to reduced yields in some sections as a result of deficient moisture.

The gross income from farm production declined 21.7 per cent, or from \$705,882,000 for 1929, to \$552,974,000 for 1930 for the Mountain States, and 19.1 per cent or from \$1,076,392,000 to \$871,130,000 in the Pacific States. Average farm returns reported by correspondents were \$868 in 1930, as compared with \$1,994 the previous year. In general, the recurrence of subnormal rainfall has served to emphasize the advantages of irrigated land as compared with dry land and has led in some cases to an expression of a corresponding preference in the land market.

As with most generalizations which might be made concerning an area as heterogeneous as the 11 Western States, there are exceptions

to the above statement. For example, some activity in low-priced lands is reported from east-central Colorado, on the western border of the new Great Plains wheat belt, with the accompanying breaking of virgin soil. Moreover, the low prices of last year have operated to place at a disadvantage those irrigated areas in which the costs of providing water are out of line with the benefits secured, and in some irrigated areas anxiety has been expressed concerning the adequacy of the water supply because of the unusually light snowfall in the mountains of the watershed and the already low levels of visible sources.

Taken as a whole, the drastic cuts in income, together with a continuation at high levels of taxes, interest, and, on irrigated land, water costs, has led to further deflation of values, accompanied by fewer voluntary sales and by increased delinquencies. In many sections mortgagees are said to be reluctant to foreclose except as a last resort; nevertheless, a considerable increase in foreclosures and in tax sales has been reported.

On the other hand, attention may be called to the back-to-the-farm movement, which appears to have made some headway even in sections far removed from industrial centers. In most sections, however, this class of prospective farm owner is often not in a position financially to buy, or to operate if he did. Hence the effect of this type of demand manifests itself to a considerable extent in an increased rental demand, in requests for sales with small down payments, and with requests to have installments based on a portion of the crop. Some bargain hunters, who are ready to pick up good places at sacrifice prices, are in evidence. Some increase in the demand for specialty farms adjacent to markets and for small farms near the cities has been reported.

In Montana,¹⁸ successive widespread crop failures in 1929 and 1930, together with the general depression prevailing during the year, have resulted in a material decline in the reported March 1 farm real estate values as compared with those reported last year. The decline was especially marked in the case of irrigated lands on which, because of water shortage in many districts in 1930, crop yields were relatively poor. Prices for crops grown on irrigated lands were generally unprofitable to growers. The year 1930 was probably more discouraging to the irrigation farmer in Montana than any heretofore experienced.

Unlike previous periods of farm distress in Montana, the present period has not been characterized by large numbers of farm operators being forced off their places. This is due to the fact that, following the distress brought about by the crop failures of 1917, 1918, 1919, and 1921 and the deflation of 1920-21, most of the farmers who lost their real estate and continued to operate in the State have remained as leaseholders. Then, too, most of the lands acquired by farmers, especially wheat farmers who have been enlarging their operations in recent years, have been acquired on lease. Sheepmen as a class have been the only important group in the market for land purchase in recent years.

The Colorado agricultural statistician comments as follows on the real-estate market:¹⁹

¹⁸DIAMOND, J. G., and SHARPLES, R. P. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

¹⁹COLLINS, H. L. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

The prices of farm products are very unsatisfactory, and there is little irrigated land changing hands at the present time; in fact, outside of speculation, very little land is being bought. The speculators are purchasing farms at the lowest possible price without any consideration for value. It is believed that irrigated-land values are slightly lower than a year ago. * * *

Dry-land values in Colorado have shown a slight decrease during the past year. * * *

Because of a land boom in the southeastern part of Colorado in 1929, heavy crop production, and favorable prices of farm products, land values during that year were higher than for many years in the past. In 1930, the boom had subsided and depressing factors caused a sharp decline in land values in that part of the State.

The statistician (6) describes the general situation in the following terms:

Because of unusually heavy production of sugar beets and all grain crops in Colorado last year, farmers are in fairly good financial condition. This advantage of heavy crop production has been partially offset by unfavorable prices.

The fruit outlook is for one of the largest crops on record. * * * There will be some reduction in truck-crop acreage in the State.

Land values and rents are sharply lower than a year ago. There has been considerable demand for nonirrigated farm land in eastern Colorado. Large areas of sod are being broken, and the total acreage of land under cultivation is showing a steady growth. * * * Sheep feeding has returned little profit, and cattle feeders have generally suffered losses from this season's operations.

In New Mexico²⁰ the value of land has shown a downward trend since a year ago. Irrigated land, especially that used for cotton, has shown a downward trend in value, due to the low price of cotton. In the northern half of the State the irrigated land is used mainly for growing hay and has not shown as large a decrease in value. A larger number of irrigated and dry farms have been taken over by mortgage holders the past year than for several years, due to low prices received for agricultural products.

The New Mexico State agricultural statistician (7) also said:

The past winter has been generally mild over the State. The precipitation for the first three months of 1931 has been above normal. The condition of fall-sown grain is usually good, with very low acreage abandonment due to drought and winter killing.

Livestock, although weak, have come through the winter with few losses. Indications so far point to a good lamb and calf crop for this season. A great many old ewes have been held over during last winter, due to the low prices. The demand for cattle has been slow, with prices generally one-fourth to one-third below those last year.

In Arizona²¹ at present few land sales are being made. Current transfers are mainly of land suitable for the production of highly specialized crops. Few distress sales have been noted. Big holders do not seem inclined to force contracts or mature mortgages. This is particularly true in cases where interest has been promptly paid or where a good chance appears that loans will eventually be paid out.

The State agricultural statistician in Utah reports:²²

A general decline in farm values in the past year is reported by correspondents and seems to be due chiefly to the reduction in prices of farm products. Such information as we have does not indicate any considerable number of farms having been sold within the past year, nor any considerable number being taken by creditors to foreclose mortgages.

In a further report (1), he states:

Continued low prices for farm products and a threatened serious shortage of irrigation water are the outstanding features in the present agricultural situation in Utah. * * *

²⁰ DANIELS, F. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

²¹ WELLS, M. R. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

²² ANDREWS, F. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

Material reductions in the acreage of canning crops seem to be taking place, due chiefly to the policy of the canning companies in trying to prevent an oversupply of canned goods this season. The sugar-beet acreage is in doubt this year; the contract price for beets is \$1 to \$1.50 per ton less than 1930.

Little selling activity in Washington is reported, except for specialty farms close to cities and farms forced on the market. The reduced activity in the lumber business appears to have led to an increased demand for rentals, especially in the western part of the State, and the business depression has caused some to leave the city and either rent or attempt to buy on a very small down payment.²³

There is very little, if any, activity in the country real estate market at the present time. * * *

Irrigated lands with improvements rate high, particularly in districts where orchards prevail on a large scale.

Dry-farming land in the coast counties show generally a sharp decrease in per acre value; but good farm lands on the coast—dairying and egg producing and small fruits (berries) prevail there—are well up in value, because of their proximity to the markets of Seattle, Tacoma, and Portland.

Nonirrigated grazing or pasture lands also show a sharp decrease in value in the coast counties.

In the Big Bend region, land values are for the most part low, because mostly dry land, rainfall light, and light wheat yields. Wheat is the only crop of importance grown there.

There is considerable complaint of depression in realty values because of the ever-increasing taxes on farm real estate and high water charges.

In Washington (8).

New orchard plantings in the Yakima Valley this spring will not be large. The mild, open winter and the early spring have been a boon to the dairy and livestock men and a doom to the hay growers. The prospects of a good hay movement are slim.

The poultry industry for the past nine months has suffered severe losses, due to ruinously low basic prices of eggs throughout the country. * * *

Puget Sound is recognized as a most profitable dairy region, because of its long pasture season and abundant rainfall. But just now the dairymen are in the doldrums. Low prices at present for their products are the cause.

Low wheat prices have led to a very low state of activity in the wheat-growing regions of eastern and southeastern Washington.

Some increase in the demand for small farms in western Oregon is reported, partly as a result of a back-to-the-farm tendency, but the number of outright cash sales is low, and buyers frequently wish to buy on crop payments.

The marginal land²⁴ is being crowded out, and this movement is just about equal to the demand, with the result that there is a buyers' market, and while land that has sold or is for sale shows a decline, the larger part of Oregon farm real estate which is not for sale has not dropped in value. * * *

Land values per acre reported in Oregon range from \$1.50 to \$2 for the arid grazing lands in the central eastern and southeastern sections up to \$600 to \$700 for the fertile irrigated fruit lands in western and southern sections, with all grades in between represented.

The California situation is spotted. The general farm situation has been commented on by the State agricultural statistician (14).

The prevailing price level of nearly all farm commodities is conducive to considerable pessimism. * * * Farm finances are strained, for many growers at least, which may force many shortcuts in operations and may affect

²³ DENNEE, J. S. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

²⁴ NEWMAN, P. C. SPECIAL REPORT ON THE FARM REAL ESTATE SITUATION. (Unpublished data.)

the production. Farm labor is in plentiful supply, with the general tendency to reduce farm wages to a point more in line with prevailing prices.

Fruit-crop prospects are generally reported from fair to good. * * * Surpluses are again feared in peaches and grapes; possibly in apricots, pears, and prunes. There has been some agitation toward the pulling of clingstone peaches and grapes on marginal lands, but no organized plan has been developed for so doing. However, there has been some voluntary reduction in the acreages of peaches and grapes; also in pears in the blight-infested areas.

High taxes and low prices present formidable difficulties to movement of real estate, and financing of sales is frequently difficult. In some instances mortgages on which payments are in arrears are foreclosed only if the mortgagors appear to be indifferent, and many cash sales are said to be at sacrifice prices. Some prospects are reported to be "looking for bargains—and finding them." The poorer farms are not wanted, except possibly by persons from the city who want simply a place to live rather than a place to farm, and renters exhibit a tendency to buy when they have money or can get easy terms. The citrus grower seems to have maintained a relatively favorable position, at least until the break in prices of products, and date gardens and grapefruit plantings are said to attract inquiries.

In so far as prospective purchasers are interested in farm land for strictly agricultural uses, as distinguished from those who are primarily seeking a place of refuge till the depression is past, interest in the far West, as in other sections of the country, has been turned anxiously to a consideration of the earning power of farm land; and the realization of the penalty attaching to the necessity of meeting fixed charges, such as taxes, interest, and curtailment of debt by means of depreciated produce has led to a careful consideration of the costs of farm-land ownership.

FARM REALTY VALUES IN SEVERAL FOREIGN COUNTRIES REACT TO LOW PRICES

Although the Bureau of Agricultural Economics makes no attempt to collect periodic and systematic information concerning land values in foreign countries, various reports of an official and semi-official nature which have been received indicate that the United States is not alone in experiencing adverse effects on the value of farm land as a result of the depressed agricultural conditions throughout substantial portions of the world.

A report²⁵ from Canada states:

The average value of the occupied farm lands throughout the Dominion last year [1930], including both improved and unimproved land, as well as dwelling houses, barns, stables, and other farm buildings, was only \$32 per acre, as compared with \$37 in 1929 and with \$38 in the year preceding.

The decline from 1929 to 1930 amounts to approximately 13.5 per cent. Declines in the various Provinces range from 2 per cent on Prince Edward Island to 20 per cent in New Brunswick. Land values in Nova Scotia are reported as having declined 17 per cent from 1929 to 1930, those of British Columbia 16 per cent, those of Manitoba 15 per cent, those of Alberta 14 per cent, those of Quebec and Ontario 13 per cent each, and those of Saskatchewan 12 per cent.

²⁵ AMERICAN CONSULATE GENERAL, OTTAWA, CANADA. REVIEW OF COMMERCE AND INDUSTRIES FOR THE QUARTER ENDED MARCH 31, 1931. [Typewritten report sent to State Department.]

A report from South Africa²⁶ indicates that the collapse in commodity prices brought difficulty to farmers, especially those who had borrowed money to buy land at high prices. Foreclosure proceedings were often instituted upon defaults, but action in many cases was dropped when it was found that sale of the land would not bring an amount sufficient to cover the mortgage.

Hungarian farmers, according to a report²⁷, have found themselves suffering from a burden of accumulated debts, and it has been stated by the Minister of Finance that unless relief is furnished, many farms will have to be sold at auction.

A report from Bavaria²⁸ states that 673 cases of forced sales of agricultural and forest property involving 5,524.5 hectares²⁹ occurred in 1930. The total encumbrance against these parcels was 13,098,000 marks while 9,520,000 marks were realized at the sale.

A report³⁰ concerning land values in Japan says:

It has been recognized for some time that land values in Japan are considerably out of line, reductions not having been made to meet the general business depression. This has resulted in excessive tax rates in the agricultural districts, where the depression in silk and rice has been felt severely.

Data gathered from certain districts of Silesia³¹ indicate that foreclosure of agricultural land in 1930 was eight times greater than in 1924.

From Switzerland, however, comes the report³² that "current prices for productive acreage" indicate that agriculture is a profitable enterprise.

CHANGES IN FARM OWNERSHIP

FORCED-SALES RATES INCREASE SHARPLY

Last year attention was directed to the failure of the rate of forced sales to continue the downward trend indicated for several preceding years. A significant feature of the developments of the past year is the 25 per cent increase in the total number of forced sales, bringing the rate to the highest point in the available record. For the year ended March 15, 1931, an average of 26.1 farms out of each 1,000 farms in the United States were sold through mortgage foreclosure, tax delinquency, bankruptcy proceedings, or as a result of other defaults, including deeding back to avoid legal action, as compared with an average of 20.8 for the previous year, and 19.5 for the corresponding period of 1928-29—the lowest rate in the available record. Data on frequency of various types of sales have been collected annually beginning with the year ended March 15, 1926.³³ (Table 9 and fig. 6.)

²⁶ CROSS, C. M. P. REVIEW OF COMMERCE AND INDUSTRIES FOR THE YEAR 1930. March 19, 1931. [Typewritten report to State Department. Copy on file in Bureau of Agricultural Economics.]

²⁷ HODGMAN, W. A. ECONOMIC AND TRADE NOTES NO. 118. March 14, 1931. [Typewritten report to State Department. Copy on file in Bureau of Agricultural Economics.]

²⁸ HATHAWAY, C. M., JR. REVIEW OF COMMERCE AND INDUSTRIES, QUARTER ENDING MARCH 31, 1931. April 15, 1931. [Typewritten report to State Department. Copy on file in Bureau of Agricultural Economics.]

²⁹ One hectare equals 2.471 acres.

³⁰ DODD, W. S. ECONOMIC AND TRADE NOTES. July 9, 1931. [Typewritten report to State Department. Copy on file in Bureau of Agricultural Economics.]

³¹ GEIST, R. H. WEEKLY NOTES OF CURRENT INFORMATION AND BRIEF TRADE AND ECONOMIC ITEMS. March 7, 1931. [Typewritten report to State Department. Copy on file in Bureau of Agricultural Economics.]

³² BEAN, J. D. REVIEW OF COMMERCE AND INDUSTRIES FOR THE QUARTER ENDED JUNE 30, 1931. August 25, 1931. [Typewritten report to State Department. Copy on file in Bureau of Agricultural Economics.]

³³ Definitions of terms, sources of data, and methods of compilation are described on p. 64.

TABLE 9.—Number of farms per 1,000 changing ownership by States and geographic divisions, 12 months ended March 15, 1926-1931

Geographic division and State	Voluntary sales and trades ¹										Foreced sales and related defaults												
	Delinquent taxes										Foreclosure of mortgages, bankruptcy, etc. ²										Total		
	1926	1927	1928	1929	1930	1931	1926	1927	1928	1929	1930	1931	1926	1927	1928	1929	1930	1931					
United States.....	29.6	28.3	26.3	23.5	23.7	19.0	4.2	5.1	5.2	4.7	5.1	7.4	17.4	18.2	17.6	14.8	15.7	18.7	23.3	22.8	19.5	20.8	26.1
New England.....	34.0	32.4	34.9	30.4	30.7	30.7	4.5	3.8	3.0	3.6	3.4	3.4	9.3	8.6	7.7	7.3	7.3	6.3	13.8	12.4	10.9	11.2	9.7
Middle Atlantic.....	35.4	37.0	33.7	28.2	28.3	24.5	3.0	3.0	3.4	3.6	3.5	4.6	8.8	8.8	8.4	8.4	9.6	9.2	11.8	11.8	12.0	13.1	13.8
East North Central.....	25.8	25.8	24.0	21.0	20.8	18.6	3.2	3.8	4.2	3.3	4.8	4.7	15.7	16.6	16.5	15.8	17.5	19.3	18.9	20.4	20.7	22.3	24.0
West North Central.....	23.0	24.3	23.9	22.4	22.9	18.9	4.3	5.3	5.1	3.6	4.2	5.5	26.5	26.7	27.3	22.3	23.3	25.8	32.0	32.4	25.9	27.5	31.3
South Atlantic.....	28.0	24.2	20.0	18.3	18.2	14.5	5.5	6.9	6.9	9.0	8.4	12.8	14.0	14.1	16.4	14.0	14.8	19.4	19.5	21.0	23.3	23.2	32.2
East South Central.....	33.5	27.3	27.5	23.4	23.9	19.4	4.0	5.8	5.4	4.0	4.9	10.0	12.4	15.9	14.6	11.2	11.2	14.8	21.7	20.0	15.2	16.1	25.9
West South Central.....	34.7	31.1	27.9	25.5	24.2	16.7	3.4	3.8	4.1	3.2	3.4	6.1	15.3	16.1	14.4	12.0	13.4	16.3	18.7	19.9	18.5	16.8	22.4
Mountain.....	32.0	33.7	34.8	35.6	33.7	24.8	9.8	9.8	12.0	10.8	11.2	13.8	40.4	35.8	27.4	18.3	18.2	22.6	50.2	45.3	39.4	29.1	36.4
Pacific.....	35.6	36.3	34.3	28.3	30.1	22.1	3.9	4.5	4.2	3.9	3.0	5.4	16.7	15.6	15.7	13.6	12.2	19.6	20.6	20.1	19.9	17.5	15.2
New England:																							
Maine.....	31.7	32.8	33.2	29.1	29.7	31.0	6.7	6.0	5.2	7.8	7.4	7.4	11.1	10.5	8.8	11.0	9.6	10.1	17.8	16.5	14.0	18.8	14.3
New Hampshire.....	34.4	33.5	37.8	29.7	31.8	37.0	6.1	5.0	5.1	2.5	5.4	7.9	6.9	8.8	9.0	4.6	5.4	3.7	13.8	13.8	14.1	7.1	10.8
Vermont.....	45.0	42.6	40.6	33.7	37.5	34.0	1.3	1.7	1.2	0.9	1.3	3.7	11.9	10.8	8.8	8.0	8.5	6.1	13.2	12.5	10.0	8.9	9.8
Massachusetts.....	31.3	23.0	35.1	32.6	28.2	25.6	2.1	2.0	1.3	2.2	2.4	1.2	5.5	6.0	5.7	6.2	7.4	4.0	7.6	8.0	7.0	8.4	9.8
Rhode Island.....	39.6	35.0	30.0	25.8	31.0	23.0	6.9	4.0	1.2	1.0	0.8	0.8	9.3	6.5	2.5	5.5	2.3	2.0	16.2	10.5	3.7	6.5	3.1
Connecticut.....	27.1	23.9	29.7	27.8	27.2	28.9	5.2	3.0	1.0	0.9	1.0	1.0	9.9	6.0	3.0	3.0	3.0	3.2	4.5	9.0	4.0	3.9	4.2
Middle Atlantic:																							
New York.....	33.4	37.5	35.6	30.1	30.4	28.1	4.1	3.9	5.2	5.2	5.0	4.8	10.8	12.7	12.2	12.0	11.6	11.6	14.9	16.6	17.4	17.2	16.6
New Jersey.....	59.4	54.4	44.4	30.8	30.6	30.6	2.8	3.4	4.0	2.0	2.2	4.5	7.8	6.0	6.9	6.0	5.4	6.4	10.6	9.4	10.9	6.0	7.6
Pennsylvania.....	33.7	34.0	30.2	26.0	26.0	20.1	1.9	2.1	1.7	2.4	2.3	4.4	7.0	5.6	5.5	5.6	8.4	7.4	8.9	7.7	7.2	8.0	10.7
East North Central:																							
Ohio.....	29.8	30.8	27.3	23.1	22.7	18.3	1.6	2.1	1.8	1.5	1.8	2.4	11.2	11.5	11.4	13.3	13.5	16.4	12.8	13.6	13.2	14.8	15.3
Indiana.....	26.8	25.8	23.6	19.2	19.2	17.1	4.2	5.4	6.3	5.4	7.1	7.9	14.0	16.9	17.3	15.7	20.5	19.9	18.2	22.3	23.6	21.1	27.6
Illinois.....	22.3	21.7	20.0	19.7	18.8	17.8	1.4	1.8	3.1	1.9	3.9	2.9	15.7	16.8	17.9	16.7	17.2	20.1	17.1	18.6	21.0	18.6	21.1
Michigan.....	30.8	30.5	30.5	24.8	24.9	21.9	4.6	6.4	7.0	4.7	8.9	7.8	16.6	18.8	18.0	17.1	21.2	20.7	21.2	25.2	25.0	21.8	30.1
Wisconsin.....	18.9	19.8	18.2	18.1	18.1	13.1	4.8	4.0	3.7	3.5	3.3	3.4	22.4	20.5	19.0	16.5	16.4	20.2	27.2	24.5	22.7	20.0	19.7

¹ Including contracts to purchase (but not options).
² Including loss of title by default of contract, sales to avoid foreclosure, and surrender of title or other transfers to avoid foreclosure.

TABLE 9.—Number of farms per 1,000 changing ownership by various methods by States and geographic divisions, etc.—Continued

Geographic division and State	Inheritance and gift			Administrators' and executors' sales ⁴					Miscellaneous and unclassified					Total all classes										
	1926	1927	1928	1929	1930	1931	1926	1927	1928	1929	1930	1931	1926	1927	1928	1929	1930	1931						
	8.0	8.8	8.9	8.5	9.3	9.4	7.0	6.7	5.4	6.1	5.7	2.2	1.1	1.3	1.1	1.6	1.7	61.4						
United States.....	8.0	8.8	8.9	8.5	9.3	9.4	7.0	6.7	5.4	6.1	5.7	2.2	1.1	1.3	1.1	1.6	1.7	61.4	68.5	66.0	58.0	61.5	61.9	
New England.....	8.4	9.9	10.4	9.6	10.3	8.8	7.5	7.1	6.5	6.1	5.6	1.9	.8	1.0	.8	1.9	1.3	58.1	62.9	64.1	58.2	60.2	56.1	
Middle Atlantic.....	8.3	8.8	8.6	8.0	8.2	8.5	8.7	8.7	7.2	7.0	7.0	2.5	1.5	1.8	1.2	1.4	1.7	58.0	67.8	63.9	56.6	58.0	55.5	
East North Central.....	8.5	9.8	9.7	8.9	9.4	9.3	9.1	8.3	6.7	7.5	7.5	2.0	1.4	1.2	1.3	1.3	1.5	55.2	66.5	63.9	57.0	61.6	60.9	
West North Central.....	8.0	8.1	8.4	8.5	9.8	9.7	6.5	6.5	6.1	6.2	5.4	2.5	1.3	1.5	1.5	1.2	1.6	64.3	72.2	72.7	64.1	68.0	66.8	
South Atlantic.....	9.7	10.2	10.6	10.4	11.4	12.5	7.7	7.9	7.5	7.9	6.5	1.9	.9	1.1	1.1	2.0	2.6	59.1	64.0	62.0	53.7	62.7	68.3	
East South Central.....	8.1	9.3	9.2	8.8	9.3	9.9	7.5	6.6	5.4	5.8	5.6	1.8	.8	1.1	.9	1.4	1.8	59.8	63.9	64.4	53.7	56.5	62.6	
West South Central.....	6.7	7.8	7.2	7.6	7.4	7.4	4.4	4.2	3.6	3.3	3.4	2.2	.7	1.2	1.0	1.4	1.7	62.3	63.9	59.6	52.5	53.3	51.6	
Mountain.....	5.0	5.8	5.6	6.0	7.0	6.9	4.4	3.7	4.1	4.7	3.6	3.5	2.3	1.9	1.9	1.4	1.1	90.7	91.5	85.4	76.2	81.7	72.8	
Pacific.....	6.2	6.9	7.1	6.5	7.3	6.6	4.0	4.4	3.7	3.6	3.6	3.3	1.4	1.4	1.4	1.5	1.8	65.7	68.7	67.1	57.5	57.6	53.1	
New England:																								
Maine.....	8.3	11.8	11.5	12.9	13.0	9.4	6.5	5.7	4.5	4.5	3.5	2.5	.6	1.0	.4	2.3	1.4	60.3	68.2	65.4	65.7	66.5	59.6	
New Hampshire.....	7.4	8.4	7.9	7.3	7.4	9.6	6.0	5.0	5.7	4.9	7.4	1.9	.4	.5	.5	2.1	2.1	56.7	62.1	65.3	50.3	57.0	67.7	
Vermont.....	8.8	10.4	10.9	8.5	7.7	6.7	9.8	10.2	12.0	12.0	7.5	1.9	1.0	1.5	1.4	2.0	1.0	69.9	76.3	73.2	64.5	69.0	59.0	
Massachusetts.....	8.6	8.3	9.5	8.3	9.6	8.4	6.8	6.0	4.0	5.0	6.8	1.4	.3	.9	1.4	1.9	1.0	48.9	51.4	58.5	54.7	54.5	47.0	
Rhode Island.....	9.9	9.0	8.9	10.8	7.0	5.3	8.0	5.0	2.0	2.0	3.2	4.2	.0	.5	.0	.3	1.0	69.9	62.5	48.1	45.1	43.4	34.3	
Connecticut.....	8.2	9.0	11.0	7.3	12.0	10.7	9.1	10.5	9.0	5.6	4.6	1.0	1.5	.4	.4	1.2	1.4	51.4	52.5	56.0	48.4	50.2	51.1	
Middle Atlantic:																								
New York.....	8.7	10.4	9.2	8.1	8.1	9.7	8.0	7.5	5.9	5.9	5.5	2.7	1.8	1.9	1.5	1.3	1.6	59.7	74.3	71.6	62.8	62.3	61.3	
New Jersey.....	7.5	7.0	6.2	6.2	6.2	4.6	6.8	8.6	5.0	5.7	9.3	.6	1.4	.9	.8	1.0	1.0	78.0	78.0	78.0	48.8	50.8	56.4	
Pennsylvania.....	8.0	7.6	8.2	8.1	8.5	7.9	9.6	8.8	8.8	8.2	2.5	1.3	1.3	1.9	1.0	1.5	1.9	53.1	60.2	56.1	51.9	54.9	40.8	
East North Central:																								
Ohio.....	8.1	9.0	9.1	9.2	9.5	8.3	9.7	9.2	8.3	8.4	8.8	2.3	1.2	1.0	1.0	.9	2.0	53.0	64.3	59.8	56.4	56.8	56.2	
Indiana.....	9.0	10.5	9.9	10.0	11.2	12.7	10.5	9.8	7.6	10.2	8.7	2.2	1.4	.8	1.2	2.2	1.2	56.2	70.1	67.7	59.1	70.4	67.5	
Illinois.....	10.5	12.4	12.7	11.9	12.7	11.0	11.0	9.5	8.4	9.5	9.7	1.2	1.0	1.0	.5	1.0	1.0	51.1	65.1	64.2	59.1	63.2	62.5	
Michigan.....	8.9	9.8	10.0	7.3	7.5	7.4	7.9	6.9	4.1	5.6	4.2	1.7	1.2	1.5	2.1	1.0	1.5	62.6	74.6	73.9	60.1	69.1	63.5	
Wisconsin.....	5.7	6.9	6.2	5.7	5.5	6.8	5.8	5.8	4.6	4.6	5.1	2.7	2.0	1.8	1.9	1.8	1.9	54.5	59.0	54.3	50.3	49.7	55.5	
West North Central:																								
Minnesota.....	6.7	6.7	6.3	6.6	8.8	11.0	5.3	4.3	4.2	5.3	6.3	2.6	1.7	1.5	.8	2.1	1.6	57.9	61.4	62.4	58.5	65.5	74.6	
Iowa.....	7.7	8.5	8.6	8.6	9.1	8.5	7.0	7.6	7.1	7.4	6.4	2.0	1.2	1.4	1.3	1.7	1.2	54.7	65.2	63.7	61.6	63.1	58.7	
Missouri.....	9.4	9.5	9.6	10.1	12.0	10.8	6.6	6.6	5.7	5.5	3.6	3.1	1.1	1.8	1.0	1.0	1.0	66.2	73.8	73.7	68.7	75.3	56.1	
North Dakota.....	6.7	6.5	8.0	8.6	7.0	6.6	5.1	5.2	5.5	4.5	2.2	1.0	.8	1.8	1.5	2.7	91.6	98.5	85.2	82.4	81.2	81.2		
South Dakota.....	8.6	8.0	8.1	8.2	9.1	9.4	5.5	5.2	5.8	5.6	3.9	1.6	1.3	1.5	1.7	1.6	1.6	93.0	101.7	99.6	71.8	72.4	76.4	
Nebraska.....	7.3	8.0	8.4	8.6	9.1	9.6	7.8	9.2	8.1	7.1	6.9	2.6	1.4	2.0	1.6	1.3	2.4	71.9	74.3	64.5	62.9	61.9	63.5	
Kansas.....	8.3	8.1	9.1	8.3	10.7	10.1	7.2	6.5	6.8	7.2	6.2	2.5	1.2	1.2	1.2	1.2	1.2	59.3	65.0	67.1	52.4	62.5	63.0	

⁴ Including all other sales in settlement of estates.

⁵ Excluding administrators' and executors' sales in 1926.

TABLE 9.—Number of farms per 1,000 changing ownership by various methods by States and geographic divisions, etc.—Continued

Geographic division and State	Inheritance and gift				Administrators' and executors' sales				Miscellaneous and unclassified				Total all classes				
	1926	1927	1928	1930	1931	1926	1927	1928	1929	1930	1931	1926	1927	1928	1929	1930	1931
South Atlantic:																	
Delaware.....	7.8	9.5	9.6	5.0	12.5	10.0	9.2	7.8	10.8	11.8	15.5	0.0	0.5	0.9	0.2	0.2	0.2
Maryland.....	10.6	10.2	11.0	9.1	12.0	6.8	7.2	6.2	7.1	7.9	6.4	1.4	.6	.8	.9	2.0	2.0
Virginia.....	10.5	13.8	13.0	12.3	13.7	12.0	6.8	3.0	3.6	3.5	4.7	2.2	1.6	1.1	2.3	1.5	1.5
West Virginia.....	9.2	11.1	10.1	12.7	16.3	8.8	8.8	8.8	7.3	7.0	7.0	3.3	1.6	1.1	1.2	2.6	2.6
North Carolina.....	10.4	8.0	11.5	9.0	13.3	9.7	7.0	3.2	8.9	7.3	6.0	3.3	.8	1.0	1.8	1.8	1.8
South Carolina.....	11.0	0.7	11.9	10.2	9.4	3.0	2.7	3.9	0.7	7.1	7.1	2.5	.8	1.5	1.2	2.8	2.8
Florida.....	4.6	4.3	4.2	7.2	6.8	3.0	2.7	1.5	4.1	4.1	1.1	.0	.5	.0	.3	.5	.5
East South Central:																	
Kentucky.....	8.4	9.3	9.5	10.5	11.9	0.0	7.7	5.5	8.4	6.1	6.1	2.1	1.0	1.2	1.5	2.0	2.0
Tennessee.....	8.9	9.2	9.0	7.7	8.7	7.7	7.0	6.5	5.7	5.4	5.4	4.9	.8	1.1	1.8	1.8	1.8
Alabama.....	7.1	9.3	9.0	7.7	6.8	9.0	6.6	5.9	3.8	5.9	5.9	1.0	.3	1.0	.6	.8	.8
Mississippi.....	8.0	9.3	8.9	9.3	8.2	8.5	7.4	5.0	5.5	4.2	5.0	2.2	.9	1.0	1.0	.8	.8
West South Central:																	
Missouri.....	8.1	7.4	8.3	7.5	7.7	3.5	3.6	3.8	3.3	3.3	4.0	1.7	.6	1.4	1.2	1.8	1.8
Arkansas.....	9.5	9.1	10.5	11.4	12.7	15.0	9.0	8.8	5.9	6.7	8.0	2.2	.9	1.5	1.0	.9	.9
Oklahoma.....	4.5	5.5	4.9	4.7	5.6	7.4	4.1	4.9	3.0	2.4	3.5	2.9	.9	1.3	1.4	.7	.7
Texas.....	6.5	8.7	8.3	7.1	7.4	5.2	3.8	3.0	3.3	2.8	2.0	2.0	.6	1.0	.8	1.7	1.7
Mountain:																	
Montana.....	4.7	5.7	5.1	7.0	8.1	5.2	5.0	5.5	5.3	4.7	4.7	2.8	2.5	2.0	2.6	1.9	1.9
Idaho.....	5.6	5.1	7.0	5.8	6.1	6.6	3.2	4.9	4.0	4.0	1.6	2.6	2.3	2.3	.7	1.7	1.7
Wyoming.....	3.2	6.0	6.1	6.3	6.4	4.4	4.3	3.5	3.5	5.2	4.5	3.4	3.0	1.8	1.4	1.4	1.4
Colorado.....	5.8	6.8	5.9	7.3	9.0	7.5	3.8	2.8	4.8	5.8	4.9	3.9	1.6	2.0	1.7	3.2	3.2
New Mexico.....	4.6	5.6	4.6	4.6	7.3	4.9	3.9	2.9	2.0	2.0	2.2	4.0	3.9	2.2	.8	1.8	1.8
Arizona.....	3.9	5.8	5.4	3.8	6.2	9.2	3.8	2.4	2.0	3.4	6.8	5.8	3.2	1.4	1.0	1.0	1.0
Utah.....	4.9	5.0	4.5	4.0	6.5	4.1	3.1	4.1	5.7	1.7	1.7	1.4	1.4	.8	.3	.5	.5
Nevada.....	4.1	3.5	5.2	5.0	7.0	6.8	3.0	4.0	3.0	2.8	6.8	3.7	1.0	1.7	2.0	1.2	1.2
Pacific:																	
Washington.....	6.4	7.4	7.0	5.9	6.2	7.9	4.2	3.8	3.3	4.0	4.3	2.5	1.5	1.6	2.1	2.3	1.1
Oregon.....	6.5	7.9	7.4	5.8	9.0	7.1	5.6	5.6	3.4	3.6	3.1	3.0	1.3	1.8	.8	1.3	0.9
California.....	5.9	6.3	7.1	7.2	7.1	5.7	3.3	4.2	4.0	3.3	3.5	3.9	1.4	1.2	1.4	1.6	0.6

Eight of the geographic divisions reported appreciable increases in forced sales; only one, the New England, had apparently experienced a slight decline. Whereas last year the generality of the increased rates was referred to as having been more significant than the actual amounts of the increases, this year both the generality and the severity of the changes are significant. Combined with reports that various agencies are foreclosing only as a last resort, and with evidences of drastic reduction of income, particular interest and significance attaches to the indicated rates of forced sales. Declining land values and voluntary sales have gone hand in hand with the increased frequency of distress sales.

The generality of the increase is even more apparent if forced transactions are divided into two groups—tax sales on the one hand and mortgage foreclosures, sales in bankruptcy, and related sales

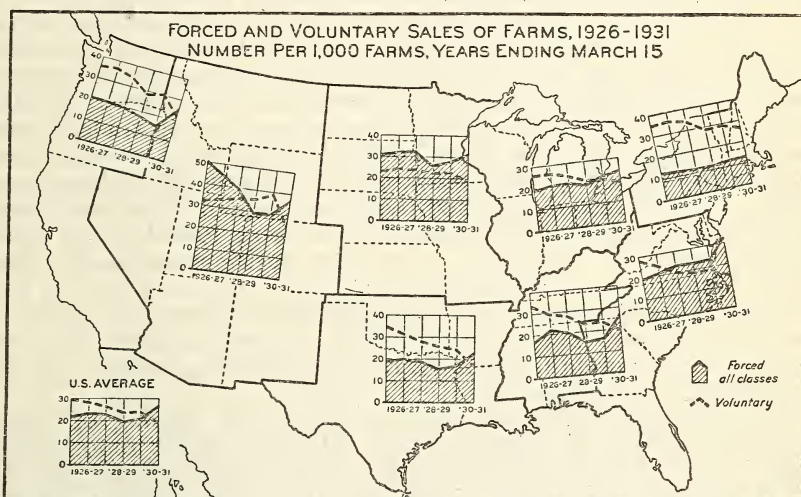


FIGURE 6.—During the year 1930-31 the rate of forced sales of farm real estate increased markedly. The number of voluntary sales and trades decreased to about the same extent. Forced sales outnumbered voluntary sales in the United States as a whole and in every geographic division except the New England and Middle Atlantic, which in the chart are combined into the North Atlantic. Reduced incomes have resulted in more delinquencies, but owners who do not have to sell are not inclined to offer their property at present prices

on the other. Seven of the nine geographic divisions reported average rates of tax sales in excess of those of last year. The greatest increases in number of such sales occurred in the East South Central States, an increase of 5.1 farms per 1,000, and in the South Atlantic States, where 4.4 more farms per 1,000 were sold as a result of tax delinquency than a year earlier. The highest average rate of tax sale, 13.8 per 1,000 farms, was reported in the Mountain States, the second highest, 12.8, in the South Atlantic, and the next highest, 10.0, in the East South Central States. Increased rates of forced sales of the second class were reported by seven geographic divisions, the greatest increase, 7.4 farms per 1,000, having occurred in the Pacific States, and other large increases in the East South Central, South Atlantic, and Mountain divisions, where averages of 4.7, 4.6,

and 4.4, farms per 1,000, respectively, were reported. The highest rate of sales of this type, 25.8 farms per 1,000, however, was reported by the West North Central States. The Mountain, Pacific, South Atlantic, and East North Central also reported rates in excess of the United States average of 18.7, with rates of 22.6, 19.6, 19.4, and 19.3 farms per 1,000, respectively.

The average changes in total forced-sale rates for the various geographic divisions varied from a decrease of 1.5 farms per 1,000 in New England to an increase of 9.8 farms per 1,000 in the Pacific and East South Central groups. The South Atlantic, Mountain, West South Central, and West North Central groups reported increases of 9, 7, 5.6, and 3.8 farms per 1,000, respectively. The changes during the last year have brought about few significant changes between divisions in the relative number of forced sales reported. When the geographic divisions are arrayed in order of decreasing number of forced sales, the Mountain States stand at the top, with an average of 36.4 farms per 1,000. For all preceding years for which the record is available the Mountain States have reported the highest average forced sale rate. The South Atlantic States, with 32.3 farms per 1,000, stand second, having traded places during the year with the West North Central group, which is now third. The New England group, as for the preceding three years of the available record, reported the lowest rate of forced sales, and the Middle Atlantic group reported the next lowest rate. Some shifting occurred among the remaining positions, with the East South Central group shifting from sixth to fourth from the top, thereby exchanging places with the East North Central group, while the Pacific States now report the fifth greatest number of forced sales instead of seventh, as last year, thus exchanging places with the West South Central group.

Considerable variation exists, as usual, in the number of forced sales reported by individual States. Montana again reported the highest rate of forced sales, 60.2 per 1,000 farms; North Dakota, South Carolina, Mississippi, South Dakota, North Carolina, Minnesota, Idaho, and Georgia reported rates considerably above the United States average, with 50, 49, 44.2, 43.4, 42.3, 38.9, 37.5, and 33.3 farms per 1,000, respectively. The generality of the trend of the year is evidenced by the fact that 34 States reported increases in rate of tax sales, 12 reported decreases, and 2 reported no change; that 34 reported increased sales through foreclosures and related default, 13 reported decreases, and 1 no change; and that 37 States reported an increase in rate of total forced sales, 9 reported a decrease, and 2 reported no change. Four of the States reporting decreases were among the North Atlantic group; others were widely scattered throughout the remainder of the United States.

Developments of the past year have served to carry to the highest point in the available record the total forced-sale rate in six of the nine geographic divisions. The exceptions are the New England, West North Central, and Mountain groups, which reached their peaks several years earlier. Many individual States, too, reported a larger number of such sales than in any other year for which estimates are available.

The following statements concerning farms owned by life-insurance companies in Ohio are based on a report of the Ohio Agricultural Experiment Station.³⁴

Life-insurance companies owned 551 farms (including 81 farms under sales contract but not including 145 in process of foreclosure), embracing a total area of 82,719 acres, on January 1, 1931. On January 1, 1930, 418 farms of 64,899 acres were owned, and a year earlier 265 farms totaling 42,568 acres. The number of farms acquired was 198 in 1930, 179 in 1929, 164 in 1928, and 58 in 1927, while the number of farms sold was 65 in 1930, 26 in 1929, 25 in 1928, and 16 in 1927. The number of farms sold in 1930 was thus over twice the number sold the preceding year, but there is some doubt as to whether the increase is due to a greater demand or to concessions on the part of the companies. The average price received for farms sold in 1930 was \$41.50 per acre, as compared with \$52.22 in 1929, \$57.61 in 1928, and \$54.02 in 1927.

There is some reason for believing that a larger proportion than usual of poorer farms were among those sold last year, and this circumstance may account in part for the lower average price per acre. Some evidence that the companies are becoming more anxious to clear these farms from their books may be found in the increase in number of farms being sold under contract, which in January 1, 1931, was 81, as compared with 36 a year earlier. Initial payments on contracts were recorded as varying from \$100 to one-third of the purchase price.

NUMBER OF FARM BANKRUPTCIES CONTINUES DOWNWARD IN MOST SECTIONS

As has been indicated in previous issues of the Farm Real Estate Situation, no data are available which make possible a comparison of the forced sale rate of the present with rates that prevailed prior to the economic upheavals precipitated by the World War. Some indication is afforded, however, by statistics of bankruptcy cases involving farmers, concluded annually in the courts. (Table 10.) The total number of farmer bankruptcies for the year ended June 30, 1930, the latest date for which data are available, was 4,464—a continuation of the downward trend which has existed since the peak of 7,872 cases in 1925. The number of cases last year is equivalent to one case of farmer bankruptcy for every 1,409 farmers, in comparison with the 1925 rate of 1 bankruptcy for every 809 farmers. The present rate, however, is several times that of the period 1909-1914.

³⁴MORISON, F. L. OHIO FARM LAND ACQUIRED BY LIFE INSURANCE COMPANIES THROUGH FORECLOSURE IN 1930. Ohio State Univ. and Ohio Agr. Expt. Sta. Mimeograph Bul. 38, 10 p., illus. 1931. [Mimeographed.]

TABLE 10.—Farm bankruptcies: Cases concluded in fiscal years ended June 30, 1922-1930

Geographic division and State	Number										Percentage of all bankruptcy cases									
	1922	1923	1924	1925	1926	1927	1928	1929	1930	1922	1923	1924	1925	1926	1927	1928	1929	1930		
United States	3,236	5,940	7,772	7,872	7,769	6,296	5,679	4,935	4,464	14.4	17.4	18.7	17.8	16.5	13.1	10.6	8.7	7.4		
New England:																				
New England	92	146	196	169	145	105	162	145	141	4.9	5.8	5.2	4.6	3.1	3.5	3.2	2.8			
Mid. Atlantic	77	148	171	190	224	224	274	270	305	2.6	3.1	3.2	2.6	3.4	3.1	3.5	3.2	3.6		
E. N. Central	247	569	684	760	844	719	874	950	973	9.0	11.1	12.2	13.4	11.3	9.2	9.3	8.8	8.0		
W. N. Central	1,068	2,005	2,785	2,889	2,813	2,404	1,729	1,471	1,257	40.3	46.1	42.5	39.2	35.4	30.3	24.2	21.2	19.2		
S. Atlantic ¹	678	959	1,085	1,037	747	585	685	515	491	17.0	16.9	17.6	12.7	10.0	9.9	7.7	6.0	5.9		
E. S. Central	201	420	483	517	579	615	321	352	336	4.9	9.1	9.7	9.7	9.5	9.7	6.9	4.5	3.8		
W. S. Central	264	539	788	650	764	567	561	484	375	9.5	20.3	22.3	23.6	25.6	20.7	19.5	17.3	14.7		
Mountain	419	730	1,040	1,071	1,142	609	420	335	293	15.2	24.3	24.6	24.3	21.8	24.2	20.0	20.9	17.1		
Pacific	192	424	540	589	511	468	453	387	329	11.0	16.3	15.7	14.6	11.9	10.0	8.5	6.1	4.6		
New England:																				
Me.	51	94	136	103	101	51	77	69	65	11.8	14.3	15.0	11.8	11.8	6.3	9.2	8.3	7.9		
N. H.	7	12	6	5	7	7	7	6	5	5.7	15.8	4.6	5.8	6.5	6.7	6.4	4.4	4.3		
Vt.	21	20	27	39	17	21	29	28	33	12.7	20.0	26.7	19.0	16.0	16.8	14.9	13.3	14.6		
Mass.	10	5	11	7	12	10	18	26	22	1.1	.3	.7	.5	.8	.6	.7	1.0	.8		
R. I.	1	0	1	2	0	2	0	2	0	0.4	0	.8	1.5	0	1.0	0	1.1	0		
Conn.	2	15	15	13	8	14	31	14	16	1.0	3.8	2.3	2.2	1.7	2.6	3.7	2.1	2.2		
Mid. Atlantic:																				
N. Y.	38	96	105	104	122	145	152	149	172	1.8	3.1	2.9	1.9	2.8	3.0	2.7	2.7	3.2		
N. J.	4	4	14	16	33	16	12	18	12	1.4	1.8	2.6	2.2	4.1	1.9	2.1	1.7	1.2		
Pa.	35	48	52	70	69	63	110	103	121	6.1	4.1	4.3	5.6	5.3	4.0	6.3	5.5	5.8		
E. N. Central:																				
Ohio	64	156	209	214	188	137	157	220	270	9.4	12.2	13.7	11.8	8.7	5.7	5.6	6.4	5.7		
Ind.	59	84	101	97	112	76	114	110	144	24.1	25.2	26.5	21.9	23.8	18.4	20.9	15.9	17.9		
Ill.	81	192	194	190	234	257	374	410	364	8.0	11.2	10.1	11.9	9.0	8.7	11.9	10.9	11.5		
Mich.	11	27	44	46	50	34	41	36	39	2.5	3.0	5.4	5.3	5.4	4.2	3.4	2.3	2.8		
Wis.	32	110	136	213	260	215	188	204	156	8.8	15.8	14.9	20.2	19.9	16.9	11.3	12.0	7.9		
W. N. Central:																				
Minn.	189	291	430	369	419	204	266	193	185	29.0	28.5	29.6	23.3	21.4	16.0	12.6	9.6	10.3		
Iowa	368	439	663	801	791	656	534	423	328	52.3	52.3	50.3	50.4	45.0	44.1	24.1	23.7	33.6		
Mo.	61	105	233	287	301	314	288	211	214	15.1	18.8	32.1	51.9	41.9	17.5	16.5	11.9	11.2		
N. Dak.	237	613	732	629	536	376	153	237	168	78.5	82.1	74.7	75.1	69.3	66.3	59.3	63.5	56.4		
S. Dak.	38	148	236	352	393	352	239	106	114	52.1	63.8	66.3	63.3	59.1	56.2	50.6	44.2	43.5		
Neb.	60	132	172	178	238	151	135	157	148	32.6	65.1	63.3	43.3	49.6	2.9	23.4	23.0	21.7		
Kans.	113	225	264	213	160	231	114	97	100	34.3	35.8	33.5	31.8	31.8	24.7	16.5	15.4	15.9		
S. Atlantic:																				
Del.	3	2	6	8	5	4	10	8	7	6.6	6.9	13.0	20.0	11.4	13.3	28.6	25.0	19.4		
Md.	17	37	42	38	54	35	49	48	49	10.7	21.8	13.7	21.7	17.1	13.1	15.5	12.8	13.0		
Va.	40	87	84	95	111	97	169	98	110	5.5	6.6	7.2	6.8	6.6	5.3	5.5	4.5	4.1		
W. Va.	12	7	11	19	10	16	25	41	30	4.5	2.1	3.2	4.6	2.1	2.4	3.1	4.2	2.9		
N. C.	13	16	36	45	37	50	38	25	39	8.3	7.4	11.3	14.6	11.6	12.9	10.1	7.9	7.4		
S. C.	1	24	36	26	53	47	46	34	25	9.8	8.7	11.3	19.3	19.3	16.8	15.0	11.4	10.9		
Ga.	588	772	848	798	467	327	394	248	218	25.1	26.5	26.0	26.2	24.7	16.6	16.6	10.7	8.5		
Fla.	4	14	22	8	10	9	13	13	13	2.8	4.0	6.0	4.3	6.6	3.0	2.2	2.1	1.9		
E. S. Central:																				
Ky.	43	88	104	108	117	164	191	131	122	19.4	15.0	17.2	15.8	11.4	13.6	10.9	7.0	6.4		
Tenn.	46	118	112	109	134	101	102	118	83	4.1	7.4	6.7	5.9	6.5	4.7	4.3	4.0	2.7		
Ala.	100	181	218	242	295	318	211	85	117	4.1	9.2	10.3	10.8	11.0	12.2	8.0	3.2	3.6		
Miss.	12	33	49	58	33	32	17	18	14	4.5	7.1	8.4	10.7	8.9	7.2	2.1	4.9	2.6		
W. S. Central:																				
Ark.	72	76	104	85	101	94	89	83	94	27.1	16.7	18.6	25.1	22.5	22.6	23.5	17.7	20.4		
La.	32	129	171	177	159	119	93	85	85	14.6	30.3	35.0	21.3	33.6	25.3	19.2	16.0	15.6		
Okla.	38	81	138	145	170	145	108	65	55	15.8	14.7	14.4	15.1	20.1	18.5	13.2	8.8	7.4		
Tex.	122	253	375	343	334	209	271	251	141	19.4	20.9	24.6	30.4	27.5	19.5	22.8	23.9	17.6		
Mountain:																				
Mont.	215	366	551	460	624	245	126	131	104	59.2	59.9	64.4	65.4	59.3	45.7	36.4	34.6	31.0		
Idaho	79	160	231	260	223	161	101	78	39	46.8	54.8	55.8	55.6	51.5	47.8	35.6	30.0	24.2		
Wyo.	12	14	36	48	38	31	44	17	12	28.6	25.2	35.3	33.6	32.5	27.2	22.9	25.0	21.1		
Colo.	77	118	128	220	143	60	63	50	49	9.0	6.2	3.7	5.3	12.9	9.2	5.6	16.3	11.7		
N. Mex.	3	3	28	27	50	22	27	26	6	1.7	19.4	28.4	33.5	32.8	27.6	31.0	31.0	8.2		
Ariz.	9	37	31	19	29	30	23	7	6	2.5	35.2	37.8	30.6	34.5	26.3	26.7	11.1	10.3		
Utah.	22	32	35	32	33	26	34	25	36	12.4	13.6	11.6	8.4	9.2	8.0	8.9	8.4	10.6		
Nev.	2	0	0	5	2	4	2	1	8	9.5	0	0	20.0	15.4	14.2	11.1	4.2	12.1		
Pacific:																				
Wash.	49	131	213	196	182	160	144	107	90	13.0	18.0	24.4	23.8	19.1	14.6	12.6	7.4	5.1		
Oreg.	33	110	91	100	109	72	67	83	50	8.9	15.3	11.4	10.8	10.0	6.9	5.5	6.5	2.9		
Calif.	110	183	236	293	220	236	242	197	186	11.0	15.9	13.4	12.8	9.8	8.9	8.2	5.4	5.1		

Division of Agricultural Finance, compiled from annual reports of the Attorney General.

¹ Includes the District of Columbia. For the whole period only one farm bankruptcy in the District of Columbia has been reported, that one being for the year ending June 30, 1928.

During the fiscal year ended June 30, 1930, the number of farmer bankruptcies declined in each geographic division except the Middle Atlantic, where both New York and Pennsylvania reported appreciable increases. In the country as a whole, however, 17 States reported increases, 29 reported decreases, and 2 reported no change. Of the increases, 2 were in New England, and 2 were in the Middle Atlantic States. There were 3 each in the East North Central, West North Central, and South Atlantic States, 1 each in the two groups of South Central States, 2 in the Mountain States, and none in the States on the Pacific coast.

Although the trend in bankruptcies for the country as a whole has been downward since 1925, some irregularity has been evident in the different sections. The peak in New England, the South Atlantic, and the West South Central States was reached in the fiscal year 1923-24. The East North Central States reported the greatest number in 1928-29, and the West North Central and Pacific States reached the peak in 1924-25. The greatest number of farmer bankruptcies in the East South Central States were discharged in 1926-27 and in the Mountain States in 1925-26. Bankruptcies in the Middle Atlantic States, on the other hand, have been increasing almost constantly since 1922. In eight States—New York, Pennsylvania, Ohio, Indiana, Maryland, West Virginia, Utah, and Nevada—a greater number of farmer-bankruptcy cases were concluded last year than in any other recent year.

The ratio of farm bankruptcies to total bankruptcies for the country as a whole has continued the downward trend begun during the fiscal year 1924-25, and for the year ended June 30, 1930, stood at 7.4 per cent. Decreases were reported for each geographic division except the Middle Atlantic, which experienced a slight increase. A change in the ratio of farm to total bankruptcies probably indicates, roughly at least, the varying financial success of farming as compared with business as a whole. It is interesting to find that except for the Middle Atlantic States the ratio has continued the downward trend in all divisions, reaching a lower point for the fiscal year 1929-30 than for any other recent year. Inasmuch as these figures relate to bankruptcy cases concluded in the courts for the fiscal year ended June 30, 1930, they probably reflect very little of the effect of the drastic reduction of incomes experienced in 1930.

VOLUNTARY SALES DROP—FARMS IN STRONG HANDS NOT FOR SALE

Correspondents continue to remark that, in many localities, the greater number of sales occurring under present conditions are distress sales, and that farms in strong hands are not for sale. These comments are substantiated by the bureau's estimates of the rate of voluntary sales. In 34 of the 48 States, the number of farms which were reported voluntarily sold last year was the lowest in the available record. Four of the excepted States were in New England—the remainder were widely scattered. For the country as a whole, the number of voluntary sales during the year ended March 15, 1931, dropped nearly one-fifth from the already low level of 23.7 farms per 1,000 reported for last year. The average rate reported by each

geographic division, except New England, which reported no change, was lower than a year ago. The decreases varied from 2.2 per 1,000 farms in the East North Central group to 13.9 per 1,000 farms in the Mountain group.

From one point of view the decline in voluntary sales presents one of the more encouraging aspects of the situation, for it no doubt reflects, in some degree, a measure of confidence in the future of agriculture by those who are in a sufficiently strong position to resist selling out. Comments have been received from the East and from the West, from the North and from the South, to the effect that "farms in strong hands are not for sale at prevailing prices." To a considerable extent this group consists of those who were able to avoid more successfully the pitfalls of the inflation and of the subsequent deflation. Perhaps the aspect of greatest practical import at present is the fact that this tendency constitutes one of the factors operating to reduce the pressure on the farm-lands market.

General areas of least voluntary movement are the South Atlantic, West South Central, East North Central, West North Central, and East South Central, where average rates of 14.5, 16.7, 18.6, 18.9, and 19.4 farms per 1,000 were reported. Somewhat greater activity, 30.7 farms per 1,000, was reported in the New England States, where the transition from agricultural to other uses, particularly of a recreational nature, appears to be continuing. The rates reported by the Pacific and Middle Atlantic groups, although considerably below those of the preceding year, are not so low as those of the Middle West and South.

In some areas of the Middle West, the frequency of bank failures has apparently had a slightly stimulating effect on land sales, for it is reported that some farms have been bought because the purchaser regarded investment in farm land a safer depository for his funds than a bank.

FORCED SALES HIGHER IN RELATION TO VOLUNTARY SALES

Available information indicates that, as might normally be expected, land sold at forced sales brings less than that sold voluntarily, and it is still reported that mortgage holders frequently bid the offerings in at the face of the encumbrances. The depressing effect of such sales is well recognized, but is frequently entirely out of proportion to the quantity of land sold. It is not surprising that, under the circumstances, the ratio of forced to voluntary sales should remain large, or should increase, as during the past year.

For the country as a whole, the rate of voluntary sales for the first time fell below that of distress sales; but in the Mountain States, distress sales (which for the two previous years had declined) again assumed the major rôle. Forced sales have predominated over other types of transactions in the West North Central and South Atlantic groups for several years; last year their dominance was increased, so that in the latter group, distress sales occur with a frequency over twice that of voluntary transactions, and in the West North Central group, about three forced sales occurred to every two voluntary. In the East North Central States, forced sales

slightly increased their lead over voluntary, and even in New England, the margin between the two classes has been narrowing somewhat, although slightly more than two voluntary transactions were closed to each distress sale during the past year.

Little is known concerning the buyers at forced sales. Bargain hunters are reported to be on the lookout for good buys. It is widely reported that the increased migration from the cities as a result of the industrial depression has resulted in numerous inquiries for farms, and it is perhaps fair to assume that some of the farms sold at forced sales have found their way to this type of buyer, even though it is still reported that mortgage holders bid in offerings at the face of the encumbrances. Some additional evidence that mortgagees are taking over considerable property is found in the fact that the book value of real estate owned by the Federal land banks as indicated in the Statements of Condition (21) increased 26.5 per cent from December 31, 1929, to December 31, 1930, and 24.6 per cent in the six months from December 31, 1930, to June 30, 1931.

LITTLE CHANGE IN ADMINISTRATORS' AND EXECUTORS' SALES, INHERITANCES, AND GIFTS

The number of farms changing hands as a result of inheritances or gifts continued at approximately the same low levels as in previous years. For the United States as a whole, approximately 9.4 farms per 1,000, or 15.2 per cent of the total number changing ownership, were transferred by these two methods. The changes in the averages for the various geographic divisions were probably for the most part, nominal. The highest rate, 12.5 farms per 1,000, was reported by the South Atlantic States, which also had the highest rate for each year of the available record, and the lowest rate, 6.6, was reported from the Pacific States. Slightly greater variation between individual States was reported, the highest rate being 18.3, and the lowest, 4.4, reported by North Carolina and by Wyoming, respectively.

Few significant changes were reported in the number of farms sold in the settlement of estates. The highest average rate from any geographic division, 7.5, was reported from the East North Central group and the lowest, 3.4, from the West South Central.

ONE-THIRD OF TRANSFERS VOLUNTARY, TWO-FIFTHS FORCED, ONE-SEVENTH INHERITANCE AND GIFT

In Table 11 are presented the relative proportions of real estate transfers effected by the various classes of transfers, annually, beginning in 1926-27, and the 5-year average.

TABLE 11.—Changes in farm ownership: Relative frequency in percentage of total transfers, 1927-1931¹

Geographic division	Voluntary sales and trades						All forced sales					
	1927	1928	1929	1930	1931	Average 1927-1931	1927	1928	1929	1930	1931	Average 1927-1931
United States.....	P. ct. 41.3	P. ct. 39.8	P. ct. 40.5	P. ct. 38.6	P. ct. 30.7	P. ct. 38.3	P. ct. 34.0	P. ct. 34.5	P. ct. 33.6	P. ct. 33.8	P. ct. 42.2	P. ct. 35.6
New England.....	51.5	54.4	52.2	51.0	54.7	52.7	19.7	16.7	18.7	18.6	17.3	18.2
Middle Atlantic.....	54.6	52.6	49.8	48.8	44.1	50.3	17.4	18.4	21.2	22.6	24.9	20.7
East North Central.....	38.8	37.5	36.8	33.8	30.5	35.6	30.7	32.4	33.5	36.2	39.4	34.4
West North Central.....	33.7	32.9	34.9	33.7	28.3	32.7	44.3	44.6	49.4	40.4	46.9	43.3
South Atlantic.....	37.8	31.8	39.4	29.0	21.2	30.0	32.8	37.0	38.1	37.0	47.2	38.5
East South Central.....	42.7	42.7	43.6	42.3	31.0	40.4	31.6	31.1	28.3	28.5	41.4	32.3
West South Central.....	48.7	46.8	48.6	45.4	32.4	44.7	31.1	31.0	28.9	31.5	43.4	33.1
Mountain.....	36.8	40.8	46.7	47.4	34.1	41.1	49.5	46.1	38.2	36.0	50.0	44.1
Pacific.....	52.8	51.1	49.2	52.3	38.0	48.9	29.3	29.6	30.5	26.4	43.0	31.5

Geographic division	Inheritance and gift						Administrators' and executors' sales					
	1927	1928	1929	1930	1931	Average 1927-1931	1927	1928	1929	1930	1931	Average 1927-1931
United States.....	P. ct. 12.9	P. ct. 13.5	P. ct. 14.7	P. ct. 15.1	P. ct. 15.2	P. ct. 14.2	P. ct. 10.2	P. ct. 10.2	P. ct. 9.3	P. ct. 9.9	P. ct. 9.2	P. ct. 9.8
New England.....	15.8	16.2	16.5	17.1	15.7	16.3	11.9	11.1	11.2	10.1	10.0	11.0
Middle Atlantic.....	13.0	13.4	14.2	14.1	15.3	13.9	12.8	12.8	12.7	12.1	12.6	12.6
East North Central.....	14.7	15.2	15.6	15.2	15.3	15.2	13.7	13.0	11.8	12.7	12.3	12.7
West North Central.....	11.2	11.5	13.3	14.4	14.5	13.0	9.0	8.9	9.5	9.1	8.1	9.0
South Atlantic.....	16.0	16.9	17.3	18.2	18.3	17.3	12.0	12.6	12.4	12.6	9.5	11.8
East South Central.....	13.6	14.3	16.4	16.4	15.8	15.2	10.9	10.2	10.0	10.3	8.9	10.1
West South Central.....	12.2	13.1	13.7	14.3	14.3	13.3	6.9	7.1	6.9	6.2	6.6	6.8
Mountain.....	6.4	6.6	7.9	8.6	9.5	7.7	4.8	4.3	5.4	5.7	4.0	5.0
Pacific.....	10.1	10.6	11.3	12.7	11.4	11.2	5.8	6.6	6.4	6.2	6.2	6.3

Geographic division	Miscellaneous and unclassified					
	1927	1928	1929	1930	1931	Average 1927-1931
United States.....	P. ct. 1.6	P. ct. 2.0	P. ct. 1.9	P. ct. 2.6	P. ct. 2.7	P. ct. 2.1
New England.....	1.1	1.6	1.4	3.2	2.3	1.8
Middle Atlantic.....	2.2	2.8	2.1	2.4	3.1	2.5
East North Central.....	2.1	1.9	2.3	2.1	2.5	2.1
West North Central.....	1.8	2.1	1.9	2.4	2.2	2.0
South Atlantic.....	1.4	1.7	1.8	3.2	3.8	2.4
East South Central.....	1.2	1.7	1.7	2.5	2.9	2.0
West South Central.....	1.1	2.0	1.9	2.6	3.3	2.1
Mountain.....	2.5	2.2	1.8	2.3	1.5	2.1
Pacific.....	2.0	2.1	2.6	2.4	1.4	2.1

¹ See footnotes of Table 9. Because no data on administrators' and executors' sales are available for 1926 that year has been omitted.

For the country as a whole the relative importance of forced and voluntary sales as methods of transfer has been practically reversed during the year. Approximately 42.2 per cent or about two-fifths of all sales were forced in 1930-31, whereas, in 1929-30, 33.8 per cent or slightly more than one-third of all transfers were forced. In

1930-31, 30.7 per cent or nearly a third were voluntary and 38.6 per cent, or nearly two-fifths, were forced in 1929-30.

Considerable shifting occurred in various of the geographical divisions. In New England, slightly more than half the transfers were voluntary, and between a fifth and a sixth of the transfers forced. In all the other divisions, the marked decreases in the proportion of voluntary transfers were to a large extent compensated by corresponding increases in the proportion of forced sales. The smallest proportion of voluntary sales, barely a fifth, was reported from the South Atlantic States, and the highest proportion of forced sales from the Mountain States, with the South Atlantic and West North Central also high. The high proportion of farms transferred through involuntary sales is indicative of the highly unsatisfactory condition existing in the farm-lands market.

LOCAL FARMERS BUYING FOR OPERATION CONTINUE LEADING BUYERS AT VOLUNTARY SALES

Of the voluntary sales and trades consummated during the year, the greater proportion were sold to local buyers. (Table 12.) In 81 per cent of the bona fide sales reported by dealer correspondents, the purchasers lived in the same county or the one adjoining that in which the farm was located. A slightly higher percentage, 82, was reported the preceding year, while for 1927-28 and 1928-29, 84 per cent of the farms were purchased by local buyers. The higher proportions of local buyers which were reported in the North Central, South Atlantic, and East South Central States, were fairly close in line with the reports of previous years, with the possible exception of the latter group which reported a higher percentage than usual for the preceding year, and the average proportion of sales to local buyers constituted a little over four-fifths of the total voluntary transactions. According to reports from the New England States only about half of the voluntary sales were made to local residents. This was no doubt largely because of the transition from agricultural to recreational and other uses, and in part because the industrial depression has forced many persons from the urban centers to consider the advantages of the cheaper food and shelter afforded in the country.

TABLE 12.—*Voluntary sales and trades of farm real estate: Percentages of purchases reported in specified classes of residence, occupation, and purpose of purchase, for the United States and for geographic divisions, 12 months ended March 15, 1928-1931*¹

Geographic division	Local residence				Purchase for operation			
	1928	1929	1930	1931	1928	1929	1930	1931
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
New England.....	61	57	59	48	82	85	80	79
Middle Atlantic.....	75	77	70	70	83	85	82	85
East North Central.....	85	86	83	84	83	82	80	82
West North Central.....	88	88	89	88	85	84	82	81
South Atlantic.....	80	82	82	82	81	81	78	80
East South Central.....	87	87	90	85	85	82	79	79
West South Central.....	81	80	82	77	76	76	73	70
Mountain.....	81	86	81	77	91	91	87	88
Pacific.....	75	72	71	72	87	91	84	90
United States.....	84	84	82	81	84	83	81	81

TABLE 12.—*Voluntary sales and trades of farm real estate, etc.*—Continued

Geographic division	Occupation of purchaser											
	Active farmer				Retired farmer				Other occupation			
	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931
	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>	<i>P. ct.</i>
New England.....	64	62	² 59	42	3	2	3	6	33	36	² 38	52
Middle Atlantic.....	62	67	² 56	50	5	4	4	7	33	29	41	43
East North Central.....	74	73	67	60	5	6	5	7	21	21	² 27	33
West North Central.....	83	82	81	75	6	5	5	8	11	13	14	17
South Atlantic.....	75	74	66	62	2	3	3	5	23	23	² 30	33
East South Central.....	78	78	² 74	69	3	2	2	3	19	20	23	28
West South Central.....	74	75	70	64	6	3	4	6	20	22	26	30
Mountain.....	91	91	83	76	1	1	2	4	8	8	15	20
Pacific.....	76	82	71	65	4	2	4	4	20	16	² 26	31
United States.....	77	78	72	65	5	4	4	6	18	18	24	29

¹ See p. 65, "Character of voluntary buying," for definitions used in determining classification. Preliminary figures.

² Revisions.

The Middle Atlantic States reported 70 per cent of voluntary sales as having been made to local buyers. Somewhat the same factors as in New England have probably been at work in parts of this area, although to somewhat lesser degree. The West South Central States reported a smaller proportion of local sales than during the preceding year, but the greater part of the decrease appears to be in Arkansas and may possibly be attributed in part to the strains on local purchasing power occasioned by the drought. Considerable variation in the proportion of local buyers is reported from the Mountain and Pacific States, but in general the proportion is lower than in the Middle West and Southeast, and greater than in the North Atlantic States. The number of farms being purchased by retired farmers continues to constitute only about one-twentieth of the total farms transferred. A slight upward tendency appears to be indicated in nearly all sections, although considerable variation between individual States may be expected, and it is doubtful if the indicated changes are of practical significance.

A rather general shift in the proportions of voluntary transfers going to active farmers and to nonfarmers is to be noted. For the country as a whole, the proportion of sales to active farmers was reported as being slightly over three-fourths in 1927-28, and in 1928-29, and slightly under that in the following year. For the year ended March 15, 1931, only 65 per cent of the farms sold voluntarily appear to have been bought by active farmers. A corresponding increase in the proportion of sales to nonfarmers has been reported. From the 18 per cent reported in 1927-28 and 1928-29, the proportion increased to 24 per cent in the following year, and to 29 per cent in the year just closed. This situation is probably in part a reflection of industrial conditions, for in general the greatest increases in proportion of purchases made by nonfarmers are in areas adjacent to industrial centers. It may also be due in part to the tendency for outsiders to invest in farm lands when attractive offers appear. It would seem that the former explanation might account for the major

part of the increase in nonfarmer purchases inasmuch as there has been only a slight decrease in the number of buyers who contemplate that either they or their children will operate the farm.

The proportion of farms bought by nonfarmers is appreciably greater in the New England and Middle Atlantic States, where 52 and 43 per cent respectively, of voluntary sales were to nonfarmers. The lowest proportion, on the other hand, is reported in the West North Central and Mountain States, having only 17 and 20 per cent, respectively. In the East North Central, South Atlantic, East South Central, West South Central, and Pacific States the division averages range from approximately one-fourth to one-third, somewhat greater variation being reported by individual States.

The increase in the percentage of sales to nonfarmers has been far greater in the New England States than elsewhere, and amounted to an increase from 38 to 52 per cent of all voluntary sales, or an absolute increase of 14 per cent. Analogous increases in other divisions were much smaller. The greatest was a change from 27 to 33 per cent in the East North Central States; the smallest was from 14 to 17 and 30 to 33 per cent in the West North Central and the South Atlantic States, respectively.

Considerable variation appears in the quality of farms in demand. If any generalization might be made concerning so variable a situation, it would be to the effect that persons who are looking for a place to farm, and who are not too cramped financially, are interested in finding good farms, strategically located. Those who expect to earn the major part of their livelihood in the cities, but who anticipate living in the country to secure the advantage of lower rent and the opportunity to raise part of their food, prefer places conveniently located, but their insistence upon good roads, and nearness to town varies according to their ability to pay the higher prices for such locations. On the other hand, those who are out of work and are interested primarily in finding a place of refuge during the period of unemployment appear to be much less exacting in their requirements, and are likely to make price the dominant factor in their choice.

THE INDUSTRIAL DEPRESSION AND THE DEMAND FOR FARMS

The farm population of the United States increased 208,000, from 27,222,000 on January 1, 1930, to 27,430,000 on January 1, 1931, according to bureau estimates. This is the first time in a decade, at least, that farm population has shown a net increase in a year. The net gain was due in part to the excess of births over deaths in rural districts and in part to the smallest net movement from farms to cities in recent years. During 1930, 1,543,000 persons left the farms for the cities, and 1,392,000 arrived at farms from cities, resulting in a net movement toward the cities of only 151,000. The industrial depression, which has resulted in mounting unemployment, is no doubt largely responsible for the situation. It is reported that an appreciable number of those coming to the rural districts were among those who left the farms during the period of industrial activity antedating the depression. On the other hand, part of the group are probably persons who have had little practical

farm experience and are therefore unfamiliar with the contingencies to be reckoned with in farming.

The movement appears to have resulted in an increased number of inquiries concerning farms for sale or rent. From comments received from dealer correspondents the impression is gained, however, that many of those leaving the city are not in a position financially to buy farms, or to operate them even if they did buy. Such a condition appears likely, for those leaving the cities are to a considerable extent those who have had difficulty in finding steady work, and their savings are likely to be more or less depleted. One of the more noticeable effects, therefore, has been an increase in the demand for farms to rent. The increased rental demand seems to be widely distributed geographically. Some of these renters will probably undertake ownership as they develop into successful tenants, as their own financial status improves, and as they find farms and prices to their liking.

Already there are evidences that this movement is under way. Of the active farmers who have bought at voluntary sales, an increasing proportion has been former tenants, according to reports. It is probable that this situation reflects the efforts being made by involuntary holders of real estate to get the land off their books and into the hands of operators. Many large holders, as evidenced, for example, by the report concerning life-insurance companies in Ohio,³⁵ and by the fourteenth annual report of the Federal Farm Loan Board (22), are making some progress in this direction.

Although the primary effect of the industrial depression on the farm real estate market appears to have been an increased rental demand, some buying appears to have occurred. It is impossible to say how many farms have been bought by persons migrating from the city; but, considering the estimated number of farms sold voluntarily (from the data in Table 9) and the proportion of such sales made to nonfarmers (from the data in Table 12), it appears that the number was possibly somewhat greater in 1931 than in 1930 in the New England, in the East North Central, and to a lesser extent in the West North Central States. A decreased number of actual purchases by this class of buyers would appear to have occurred, on an average, for the other divisions, inasmuch as the decreased number of voluntary sales probably more than offset the increased proportion of such sales being made to nonfarmers. This does not mean, of course, that some sections of those States may not have experienced increases, especially those around the larger cities. Whether or not these observations are correct the stimulation to the farm real estate market afforded by this class of buyers has been insufficient to prevent the number of voluntary sales from declining severely during the past year.

The above indications are based on voluntary sales; no data are available on the type of buyers at forced sales.

The industrial depression has apparently contributed to bringing about some reversal in certain rather widely held opinions concerning farm life. During the industrial boom of recent years the great increase in number and variety of modern conveniences usually as-

³⁵ Morison, F. L. Op. cit. See 34.

sociated with higher standards of living was an important factor in luring persons to the cities. But the mounting unemployment during the depression has served to focus attention on the fact that a farmer who has maintained a substantial equity in his farm home has greater security in the matter of food and shelter. If necessary, he can provide on his own farm nearly all the absolute requirements for both himself and his dependents. The realization of the ultimate value of this security is being impressed both on farmers and on those who come from the city in search of food and shelter.

FARM CREDIT ³⁶

Money rates in central markets have reached record low levels during the last year. Prime commercial paper, four to six months, declined from $3\frac{1}{4}$ per cent in July, 1930, to 2 per cent in July, 1931; prime bankers' acceptances declined from $1\frac{7}{8}$ per cent to seven-eighths per cent. The discount rate of the Federal Reserve Bank of New York declined from $2\frac{1}{2}$ per cent a year ago to a new record low of $1\frac{1}{2}$ per cent on August 1, 1931. Other discount rates are, 1 bank 2 per cent, 4 banks $2\frac{1}{2}$ per cent, 5 banks 3 per cent, and 1 bank $3\frac{1}{2}$ per cent. Recent Government financing included an issue of \$800,000,000 in long-term bonds at 3 per cent, the lowest rate for such issues since before the war.

Rates in the more distant centers, as usual, have shown less variation than those in New York. Rates quoted to customers by banks in New York were 2 per cent less in July, 1931, than at the peak of rates reached in October, 1929; those in 8 other northern and eastern cities were $1\frac{3}{4}$ per cent lower, and those in 27 southern and western cities were only 1 per cent lower than in 1929. It is probable that country banks have had less change in rates than have city banks.

Interest rates on agricultural loans have reflected only in part the low rates quoted in central money markets. The discount and loan rates of 9 Federal intermediate credit banks were $3\frac{3}{4}$ per cent and those of 3 banks 4 per cent in August, as compared with 10 banks charging 4 per cent and 2 banks $4\frac{1}{2}$ and 5 per cent in August, 1930. Loans from this source, however, represent only a small part of total short-term farm credit.

Rates on farm-mortgage loans have shown little change from a year ago. Despite the abundance of loan funds, conservative lending has been prompted by falling prices of farm products, and in some areas by drought conditions which increased delinquencies and foreclosure. These difficulties have served to increase handling costs and allowances made for risk, thus preventing any substantial reduction of rates quoted to borrowers. Low prices, marked reduction of bank deposits, and continued bank failures have resulted in limiting the amount of credit available from local sources.

The business depression, falling land values, and continued recession in prices on the security markets have contributed to bringing nearly all land-bank bonds to low prices, with consequent yields sufficiently high to make their sale impracticable in view of the legal

limit of 6 per cent on loaning rates. Yields on Federal land-bank bonds, after a slight decline from the 1929 peak of more than 5 per cent, continued with an average of about 4.75 per cent through the early months of 1931 and rose above 6 per cent in August.

Rates quoted to borrowers on farm mortgages have therefore remained correspondingly high. Average quoted rates of the 12 Federal land banks have receded only a fraction from the peak of 5.75 per cent in October, 1929, and have remained at 5.63 per cent for a year following August, 1930. Rates of nine banks in August, 1931, were $5\frac{1}{2}$ per cent and of three banks 6 per cent. As of the same date, 39 joint-stock land banks quoted a rate of 6 per cent, 8 banks $5\frac{1}{2}$ per cent, and 2 banks $5\frac{3}{4}$ per cent. Difficulties in marketing bonds, however, have resulted in a nominal volume of new loans.

Occasional instances are reported in which lower rates have been granted on renewals, provided that the principal was reduced. Changes in interest rates on long-term loans in previous years usually have lagged a year or more behind changes in short-term money rates and bond yields. Following the high rates of 1920, rates quoted to borrowers by the Federal land banks were not lowered until 22 months following the peak of the short-term loan rates in June, 1920. During that decline farm-mortgage rates quoted by insurance companies moved in general conformance with the land-bank rates. During the last year elements of cost and risk arising out of loans made in previous years appear to have been contributing factors in delaying the decline in quoted rates which would ordinarily be expected to result from markedly lower money rates on the central markets.

A conservative lending policy thus continues to characterize farm-mortgage activities. Lower land values and generally lower farm prices have induced restriction of amounts granted in new loans and a scaling down of amounts granted on renewals. As a consequence there has been a reduction in the total farm-mortgage holdings of the principal lending agencies.

FARM REAL ESTATE TAXES ²⁷

TAX PER ACRE DECLINES SLIGHTLY

From 1929 to 1930 the average tax per acre of farm real estate in the United States declined for the first time in the 17 years covered by the department's index of farm taxes. It was a very slight decline, but it was a decline nevertheless. If the 1924 tax is taken as a base and is called 100, the tax per acre in 1929 was 106.8; and in 1930 it was 106.2, a decline of six-tenths of a point. Although the tax per acre for the country as a whole declined slightly, five of the nine geographic divisions show further increases. (Table 13.)

²⁷ Prepared by the Division of Agricultural Finance.

TABLE 13.—*Taxes on farm real estate: Relative change by geographic divisions, 1924-1930*

[1924=100 per cent]

Geographic division	1924	1925	1926	1927	1928	1929	1930
New England.....	100.0	100.9	105.4	108.8	111.1	112.7	115.8
Middle Atlantic.....	100.0	103.5	103.2	104.5	104.7	105.4	106.0
East North Central.....	100.0	99.5	100.3	103.0	102.3	103.9	103.0
West North Central.....	100.0	98.4	99.5	100.8	102.9	104.0	105.8
South Atlantic.....	100.0	103.5	111.1	111.9	113.7	116.5	113.0
East South Central.....	100.0	101.5	103.6	103.4	106.0	108.1	106.7
West South Central.....	100.0	100.1	98.6	103.5	107.0	110.3	112.5
Mountain.....	100.0	103.2	102.3	104.9	106.0	109.5	109.1
Pacific.....	100.0	100.9	102.9	105.6	110.0	109.5	110.9
United States.....	100.0	100.3	101.5	103.6	105.1	106.8	106.2

Division of Agricultural Finance.

TRUE TAX RATE INCREASES

There has been no reduction, however, in the "true" tax rate. In 1924 farm real estate taxes amounted to \$1.22 per \$100 of full value; in 1927, \$1.37; in 1928, \$1.43; and in 1929, \$1.46. If 1930 taxes are compared with land values as of March 1, 1930, the rate for 1930 remains \$1.46—the same as for 1929. But land values declined 8 per cent between March 1, 1930, and March 1, 1931. It is safe to say, therefore, that the "true" tax rate on farm real estate for most of 1930 was well above the rate for 1929.

APPENDIX

SOURCES OF DATA AND METHODS OF COMPILATION

The information on farm real estate that appears in this circular has been obtained from the reports made by the voluntary crop correspondents of the Bureau of Agricultural Economics through its Division of Crop and Livestock Estimates; by a special corps of farm real estate dealers, appraisers, country bankers, loan correspondents, and similar groups in close contact with the farm real estate situation, voluntarily cooperating with the Division of Land Economics; and by special reports contributed by the State agricultural statisticians of this bureau and cooperating State agencies. It has been supplemented by the published reports of recognized agencies that are closely identified with the farm real estate field. The generous cooperation from all of these sources is gratefully acknowledged.

All of these data are subject to revision from time to time as superior data become available, as revisions are made in other data used in their construction, or as other changes are found advisable to give greater accuracy or representativeness.

Correspondents were cautioned to exclude, throughout, all properties used or acquired for suburban, country home, resort, timber, mining, oil, factory, or other purposes that are primarily nonagricultural; but the prevalence of the influence of the first three of these purposes, in the Northeast particularly, together with the frequent genuine difficulty of making a decision on the matter, suggests that none of this real estate information is entirely free from this factor.

INDEX NUMBERS OF FARM REAL ESTATE VALUES

Details of the compilation and construction of the index number of farm real estate values were given in Circular 15 (23). The index is computed annually from the average values per acre for "all farm lands with improvements" prevailing in their respective localities as estimated by crop reporters, weighted by districts within States whenever the character of the sample permits, weighted between States according to relative importance, and expressed as a percentage of the average value recorded for the three years 1912-1914, which is regarded as 100 per cent. All values are as of March 1. Data for years prior to 1912 are not available. Reports from real estate dealers on the value item serve as a check.

The index is weighted with constant weights. The total acreage of all land in farms reported by the census of 1925 is used for this purpose. As the index is not a sales-price index but an index of estimated value, it may be biased somewhat toward asking or holding prices. Crop correspondents' reports also appear to reflect proportionately more of the better lands than of the poorer, and to reflect the comparatively well-established farms and stable agricultural communities more than either those just being occupied, or those once occupied but now, to all outward appearances, out of the agricultural picture. In some of the Western States the distribution of the reporters tends to overrepresent the higher-value irrigated properties. Elsewhere the crop correspondents probably represent in a general way the typical crop and livestock farms, more than the small, intensively operated specialty types. Crop reporters are specifically instructed to report only on agricultural properties and to omit from consideration all lands used or held primarily for residential, industrial, or other nonagricultural purposes.

CHANGES IN FARM OWNERSHIP

The statistics of changes in farm ownership are averages compiled by the Division of Land Economics from reports made by crop correspondents. They apply to the 12-month period ended March 15 and have been collected annually,

beginning March 15, 1926. Data for years prior thereto are not available. Whenever the character of the sample so permits, the averages are weighted within States according to the crop-reporting districts of the Division of Crop and Livestock Estimates. The numbers of farms in each such district, as returned by the 1925 census, are used as weights. The same series of weights is used to obtain the averages for geographic divisions and for the United States as a whole.

Under the census definition, cropper tracts are defined as farms, although they are really parts of plantations. But a change of ownership usually includes the entire plantation. Therefore in the Southern States deduction of the number of croppers was made as affording, for weighting purposes, the closest available approximation to the number of southern "ownership units" as customarily bought, sold, and otherwise transferred.

Correspondents were asked, first, to state in their reports the number of farms in their school district, township, or similar civil subdivision with which they were familiar (ranches and plantations to be considered as farms). They were then asked to classify all the changes in the ownership of these farms that had taken place within the preceding 12 months only, as follows: (1) By inheritances and gifts; (2) by administrators' sales, executors' sales, and all other sales in settlement of estates (beginning with the 1927 inquiry); (3) by forced sales on account of delinquent taxes; (4) by forced sales in foreclosure of mortgage or in bankruptcy, or loss of title, or other transfer to avoid foreclosure; (5) by voluntary trades or sales, including contracts to purchase (but not options); and (6) by all other farm-ownership changes not otherwise classified. Correspondents were cautioned against possible duplication.

The term "inheritance" was amplified in the 1927 inquiry to include all cases in which heirs obtained ownership upon death of a relative, except cases in which they purchased at sale in settlement of the estate. This appears to be more generally in accord with popular usage, which ordinarily does not restrict the term to its narrower legal interpretation.

The observations made with respect to the representativeness of the data on farm real estate values appear also to apply in a general way to the data on changes in farm ownership.

CHARACTER OF VOLUNTARY BUYING

Data on the character of voluntary farm buying are computed annually from reports of individually listed actual sales and trades furnished by the cooperating farm real estate dealers, appraisers, loan correspondents, and country bankers. Compilation of these data was begun in 1928. They apply to the 12-month period ended April 1. The figures used are, for the present, based on simple totals of all reports received, and are preliminary in character.

Occupational status of buyer was determined on the basis of the question: "At the time he bought was the buyer (1) an active farmer, or (2) a retired farmer, or (3) mainly in some other occupation?" This phrasing of the question differs from that used heretofore by the addition of the phrase "At the time he bought," in order to make the question as free from ambiguity as possible. There is no direct method of determining whether the changing proportions noted under the discussion (p. 58) are due in part to this change, but logical considerations such as the general economic situation, the continuation of trend exhibited last year, and general comments, would seem to minimize the weight to be given to such a possibility. A local resident was defined as one "from the same county, or a county adjoining that in which the farm bought was located." Purpose of buyer was determined on the basis of a yes or no answer to the question: "As far as you know, did the buyer buy to actually work the place himself or to turn it over to some of his children to own or operate?"

LITERATURE CITED

- (1) ANDREWS, F.
1931. SUMMARY OF THE SITUATION IN VARIOUS STATES. UTAH. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 15(6) : 17.
- (2) BOUTON, C. S.
1931. SUMMARY OF THE YEAR PAST IN VARIOUS STATES. ARKANSAS. U. S. Dept. Agr., Bur. Econ., Agr. Situation 15(5) : 13-14.
- (3) BRYANT, H. F.
1931. SUMMARY OF THE YEAR PAST IN VARIOUS STATES. KENTUCKY. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 15(5) : 3-5.
- (4) CARL, L. M.
1931. SUMMARY OF THE YEAR PAST IN IOWA. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 15(1) : 2-3.
- (5) CHAMBERS, C. R.
1924. RELATION OF LAND INCOME TO LAND VALUE. U. S. Dept. Agr. Bul. 1224, 132 p., illus.
- (6) COLLINS, H. C.
1931. SUMMARY OF THE YEAR PAST IN VARIOUS STATES. COLORADO. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 15(5) : 12.
- (7) DANIELS, F.
1931. SUMMARY OF THE SITUATION IN VARIOUS STATES. NEW MEXICO. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 15(6) : 17.
- (8) DENNEE, J. S.
1931. SUMMARY OF THE YEAR PAST IN VARIOUS STATES. WASHINGTON. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 15(5) : 16-17.
- (9) EBLING, W. H.
1931. SUMMARY OF THE YEAR PAST IN VARIOUS STATES. WISCONSIN. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 15(5) : 10.
- (10) GILLET, R. L.
1931. SUMMARY OF THE YEAR PAST IN VARIOUS STATES. NEW YORK. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 15 (5) : 2-3.
- (11) HICKS, J. A.
1931. SUMMARY OF THE SITUATION IN VARIOUS STATES. VIRGINIA. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 15 (6) : 13.
- (12) HOLMES, I.
1931. SUMMARY OF THE SITUATION IN VARIOUS STATES. MICHIGAN. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 15 (6) : 16.
- (13) JUSTIN, M. A.
1931. SUMMARY OF THE YEAR PAST IN VARIOUS STATES. INDIANA. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 15 (5) : 6-7.
- (14) KAUFMAN, E. E.
1931. SUMMARY OF THE YEAR PAST IN VARIOUS STATES. CALIFORNIA. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 15 (5) : 15-16.
- (15) KIRK, P. H.
1931. SUMMARY OF THE YEAR PAST IN VARIOUS STATES. MINNESOTA. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 15 (5) : 9.
- (16) LOGAN, E. A.
1931. SUMMARY OF THE SITUATION IN VARIOUS STATES. MISSOURI. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 15 (6) : 17.
- (17) REED, F. K.
1931. SUMMARY OF THE YEAR PAST IN VARIOUS STATES. KANSAS. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 16 (5) : 8-9.
- (18) ROBINSON, C. H.
1931. SUMMARY OF THE YEAR PAST IN VARIOUS STATES. TEXAS. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 15 (5) : 14-15.
- (19) TUTTLE, A. R.
1931. SUMMARY OF THE YEAR PAST IN VARIOUS STATES. OHIO. U. S. Dept. Agr., Bur. Agr. Econ., Agr. Situation 15 (5) : 6.

- (20) UNITED STATES DEPARTMENT OF AGRICULTURE, BUREAU OF AGRICULTURAL ECONOMICS.
1930. INCOME FROM THE FARM PRODUCTION IN THE UNITED STATES, CALENDAR YEARS 1924-1929. U. S. Dept. Agr. Crops and Markets 7: 370-374.
- (21) UNITED STATES TREASURY DEPARTMENT, FEDERAL FARM LOAN BUREAU.
1930-31. STATEMENTS OF CONDITION OF FEDERAL LAND BANKS, JOINT STOCK LAND BANKS (AND FEDERAL INTERMEDIATE CREDIT BANKS), COMPILED FROM REPORTS TO THE FEDERAL FARM LOAN BOARD AS OF DECEMBER 31, 1929, DECEMBER 31, 1930, JUNE 30, 1931.
- (22) [UNITED STATES] FEDERAL FARM LOAN BOARD.
1931. FOURTEENTH ANNUAL REPORT OF THE FEDERAL FARM LOAN BOARD, YEAR ENDED DECEMBER 31, 1930.
- (23) WIECKING, R. H.
1927. THE FARM REAL ESTATE SITUATION, 1926-27. U. S. Dept. Agr. Circ. 15, 42 p., illus.
- (24) ———
1928. THE FARM REAL ESTATE SITUATION, 1927-28. U. S. Dept. Agr. Circ. 60, 64 p., illus.
- (25) ———
1929. THE FARM REAL ESTATE SITUATION, 1928-29. U. S. Dept. Agr. Circ. 101, 67 p., illus.
- (26) ——— and STAUBER, B. R.
1930. THE FARM REAL ESTATE SITUATION, 1929-30. U. S. Dept. Agr. Circ. 150, 70 p., illus.

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